

# MANUFACTURERS' RECORD.

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## Manufacturers' Record.

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BALTIMORE, DECEMBER 14, 1894.

### Moving Southward.

Some months ago the MANUFACTURERS' RECORD stated that several of the largest cotton-manufacturing companies in New England would build mills in the South. At the time this was vigorously denied, and even some of the mills that were mentioned disclaimed any expectation of building Southern mills. Since then the Massachusetts Cotton Mills, of Lowell, has voted to organize a \$600,000 company to build a 50,000-spindle mill in the South, as stated two weeks ago in the MANUFACTURERS' RECORD. Now comes the Dwight Manufacturing Co., of Chicopee Falls, Mass., which has just voted to build a \$500,000 cotton mill in Alabama. Thus the predictions of the MANUFACTURERS' RECORD, which were based on knowledge of the facts in the case, are being verified. It will not be very long before other New England mills will follow.

THE Southern Magazine Corporation, of Louisville, Ky., which has been issuing a literary publication called the Southern Magazine, has made an assignment. While greatly regretting this unfortunate circumstance, the MANUFACTURERS' RECORD is not surprised, because the profitable establishment of a purely literary magazine relating only to Southern affairs is impossible, except with sufficient capital to lift the magazine to the very highest literary plane, and maintain it at that point regardless of expense for several years. We doubt not that the failure of the Southern Magazine will be pointed out as an illustration of the South's failure to appreciate literary work in its behalf, but with all due deference, and with the very best wishes for those who are interested in the matter, that is not the cause. Unless the publishers of the magazine were in a position to maintain it at the very front rank for several years without counting the capital that must necessarily be sunk during that time, then failure was foreordained. The same thing would prove true in the North as well.

## More Attention to New Steel and Iron Enterprises.

It is a noticeable fact that, notwithstanding the general depression in iron and steel and the low prices prevailing, there is a disposition on the part of heavy capitalists already interested in this industry to extend their operations. As stated in the MANUFACTURERS' RECORD a few weeks ago, a very large plant is to be built at Buffalo; the Carnegie interests are preparing to spend about \$1,000,000 in building new furnaces and making enlargements at Pittsburg; the Johnson Company will build an enormous plant at Lorain, Ohio, to include six new furnaces and steel-rail mill; and now comes a concentration of iron and steel plants at Alexandria, Ind. The New Albany Rail Mill Co. at New Albany, Ky., and Alexandria, Ind., has been purchased by a party of Western capitalists who own the Valley Steel Co., of Belleville, Ill. These three plants will be concentrated at Alexandria, Ind., and consolidated. Reports from Pittsburg show a very decided revival in manufacturing enterprises, including the starting up and enlargement of iron and steel works, glass factories and miscellaneous interests. The fact is that the business men of this country are recognizing the truth that while dullness and depression may exist for a time, and there may seem to be an overproduction of iron and steel, yet the growth of the country must inevitably continue on a sufficiently large scale to justify a steady expansion in productive capacity. The first half of every decade since 1860 has shown little or no increase in the production of iron, while during the last half of every decade production has more than doubled. From 1880 to 1885, for instance, there was practically no increase in the output of iron, while between 1885 and 1890 the production largely more than doubled. It is probable that between 1890 and 1895 there will be little or no increase in production, but, if we are to judge the future by the past, there ought to be an enormous increase between 1895 and 1900. If the consumptive requirements of 1900 shall prove to be as great as predicted by Mr. Edward Atkinson and Mr. Abram S. Hewitt some years ago, this country will have to produce between 17,000,000 and 19,000,000 tons of pig iron in that year. To do this would require a vast expansion in our iron and steel interests during the last half of this decade, and a great activity, just as we have seen in the second half of the three preceding decades from 1865 to 1870, from 1875 to 1880, from 1885 to 1890. There may be no sound reason to prove that this activity in the second half of each decade will justify anticipating the same thing between 1895 and 1900, but the general conditions now existing seem to warrant just such a condition of affairs. During the last few

years we have been passing through one of our periodical times of depression, and this must necessarily, as always in the past, be followed by a rebound and a period of great activity. The fact that the foremost iron and steel-makers of the country are not discouraged, but are improving their plants, reducing the cost of their output by new processes and new methods and building great works, proves their faith in the future.

### A Poor Class of News.

THE MANUFACTURERS' RECORD regrets to note a way by which the Louisville Courier-Journal seeks to give variety to its columns. It throws together three or four items about Southern enterprises which have been unfortunate, and heads them "Boom Towns." Here is a sample:

In an Arkansas boom town a \$2200 lot brought \$200 'tother day. Arkansas never suffered much from the boom fever.

The Courier-Journal could find such items as these in any part of the country. What it terms boom towns have never been confined to the South, which Editor Watterson seems to have picked out for illustration in this column. Everyone knows how they have sprung up in the West and have died out. But why is it necessary for such a paper as the Courier-Journal—supposed to be loyal to the South—to take up such matters, which are liable to be copied, and deter many investors or prospectors from entering the Southern States, because they imagine from reading the few lines about one locality that the whole Southern country is just the same. Why not publish more facts about its progress and prosperity, and less of these petty criticisms, which hinder its growth.

While talking about boom towns, why not touch on the wiping out of hundreds of millions of dollars in Atchison, Topeka & Santa Fe, Northern Pacific and other roads; why not be honest and show that, unfortunate as boom-town records may be, the losses have never been one-tenth as great as in railroad and other investment interests.

A LEADING business man of Alabama, in a letter to the MANUFACTURERS' RECORD, referring to the bill now pending in the legislature of that State to exempt from taxation for ten years all new industries which have an actual investment of \$25,000, says: "If this bill becomes a law it will bring millions of dollars into the State." The value of such a law as this would not simply be in the amount saved to manufacturers, but in the announcement that it would be to the world that Alabama is heartily and vigorously in favor of doing everything to help its industrial interests. The MANUFACTURERS' RECORD would be glad to see Alabama and every other

Southern State take such action as this. The highest prosperity and advancement of the South necessarily depend upon the development of its industrial interests. The progress of its agricultural interests is intimately allied with the progress of its industrial interests. If the South can be made the great manufacturing region for which nature has so lavishly provided a foundation, there will be no question as to the prosperity of its farmers, for there will then be a home market for all that they can produce.

### Encourage Surety Companies.

In several of the Southern legislatures now in session bills have been introduced, the main feature of which is the authorization of the acceptance of corporations on bonds of suretyship. These States are progressive. They have been quick to realize the fact that personal suretyship is rapidly becoming a thing of the past, and, like their sister States of the North, recognize the advantages to be obtained from surety companies.

In many of the Southern States heretofore nothing but personal security would be accepted on judicial bonds, but it is safe to say that in the very near future this will be remedied. Those in a position to become bondsmen for their friends have become tired of assuming such liability when they know that for a small consideration indemnity can be secured from a corporation. On the other hand, the compulsory personal suretyship often militated against a man who, although of the highest integrity, was without wealthy friends, and, therefore, could not secure the required bond necessary for him to give to act as an administrator, executor, trustee or guardian, thereby disqualifying him from filling such a position. The surety company obviates this by the fact that its chief requirement is honesty on the part of the applicant for a bond.

Banks, railroads, express companies and all large institutions long ago adopted corporation security, and some financial institutions think so well of it that they advertise the fact that their employes are bonded in this or that company. Many of these institutions pay for the bonds of their employes, looking upon the expenditure as so much insurance. They have by personal experience learned that recovery on a personal bond is rarely made without a lawsuit, and the chances are that more than the penalty of the bond is spent in litigation.

There ought to be no hesitation on the part of the Southern lawmakers passing such measures as will enable corporations to become security on any class of bond. Great care, however, should be taken to see that there is not incorporated in the bills passed some clause that will prevent such companies doing business within the State, owing to the



restrictions that are imposed. The amount of paid-up capital and general strength of the company should be the salient features; at least, this was the view taken of the question by Congress in passing an act authorizing the acceptance of surety companies on all bonds given to the government. In this law, which was approved August 13 last, \$250,000 is the minimum amount of paid-up capital required of a company. Every provision should be made for the protection of the policy-holder, but at the same time they should not be so exacting as to cause any good, healthy surety company to hesitate undertaking to comply with same.

The South especially needs all the new blood it can get, and every surety or any other insurance company of sound financial standing that enters a State is an advantage to it, and encouragement should be held out to these corporations to establish themselves all over the South.

#### More Texas Visitors.

Following the tour of Chicago and St. Louis capitalists and merchants through Texas comes the announcement that a party of Wisconsin journalists are to make a trip over the State through the enterprise of its people. Probably every editor in the party will have at least one or more columns in his paper complimentary to Texas as a result of the trip, and the people of Wisconsin will have placed before them strong inducements to come to Texas and invest their money.

Why should not these and other Western editors be asked to visit other Southern States? Many of them would learn, for the first time, how nature favors the South as a location for the farmer, the business man and the manufacturer. The MANUFACTURERS' RECORD cannot speak too highly of the enterprise of the Texas residents in promoting these visits, but it desires the business bodies in other States to follow their example in inviting excursion parties to visit their respective localities.

THE views of Mr. D. A. Tompkins, of Charlotte, N. C., on the low price of cotton, recently published in the MANUFACTURERS' RECORD, are attracting much attention, and have created a discussion in the Southern press which will be profitable in producing a variety of views on the subject. The Savannah Times says:

We agree with Mr. Tompkins that great changes are taking place in the production of cotton; that the large plantations are being broken up into small farms; that the small farmer is producing his own food crops, and hence cotton is raised at less cost than on the big plantations that are wholly given up to cotton, and that as the changes indicated go on the cost of production will decrease, but we are not prepared to believe that cotton will not go above five cents a pound again.

The Times is partly in error. Mr. Tompkins did not say that cotton would not go above five cents, but stated that, with modern methods of agriculture, it could be produced at a profit at that figure. There is a vast difference between these statements, and we trust that the Times will note it.

A DISPATCH from Wharton, Texas, states that a tract of land between Wharton and Bay City has been laid off for a town, and that a company is to be formed to colonize it. It is located in what is known as the "black belt" farming lands.

#### "Self-Help is the Best Help."

ROANOKE, VA., November 15.

Editor *Manufacturers' Record*:

As the discussion of what is the best or proper thing for the South to do as a means to the recovery of her former financial prestige, and for the best interests of her people, seems one to which so many are paying attention, and, as the columns of the MANUFACTURERS' RECORD seem so graciously granted to a number of these advisers of the South, I thought it possible that a second communication on the subject would be allowed me. After briefly passing in review a communication from "U. U." in your issue of November 9, 1894, I will add some suggestions myself to the volumes which are being written. One would suppose from "U. U.'s" letter that there were whole neighborhoods and counties full of people in the North and West who had their baggage all packed, ready to "move at a moment's notice," as they used to say during the war, and all that was needed to secure their immediately taking up the line of march southwardly was that some one should go there and point out the road to them. In other words, that they were living a somewhat nomadic life, and were on the move every spring after the roads got good, somewhat as the Kurds we read of in Central Asia.

I agree fully with "U. U." "that something more than oratory or a conclave of brilliant and distinguished men is needed to insure the end of bringing a good class of settlers into our section." Yes, indeed, a great deal more is needed than that. I also agree with him in his view as to the impropriety, in an article of the kind he was writing, of "enlarging or dwelling upon our natural advantages." Yes, truly, we have had that ad nauseam. I will also agree with him as to the propriety of "urging upon our legislatures the propriety and necessity of appropriating money" for the purpose of assisting in the rehabilitation of the South. Possibly if "U. U." and I were personally co-operating in this work, which he and I both, with so many others, have so much at heart, there would be doubtless found many other features of the work in which we would agree. But I will not agree with him that one single dollar more shall be spent in what is known as "advertising the South" by the methods he proposes—of sending agents North or West to lecture on the "resources" of the South, with a view to inducing immigrants to come here, until something more is done by our own people, showing that they appreciate the necessity of some such immigration, and are willing to make the proper preparation for its reception, somewhat in the line of what was outlined by the writer in a former communication to the MANUFACTURERS' RECORD on this subject. In other words, I have heard all I care to hear, and the South has heard all that it is well for her to hear, of this thing of looking anywhere else than to herself for the strength through which her recovery is to be secured.

"To thyself be true,  
And thou can'st not then  
Be false to any man!"

May well be now our motto, and it is only after we have fully entered into the spirit of these lines that there will ever any salvation come to us.

It is said in a certain place of one who had fallen to a very low stage of degradation, that it was not until "he came to himself" that he realized to what a depth he had fallen, and what pleasures there were in store for him if he would only go to them, and it was then that he resolved that "I will arise and go to my father." Now, it strikes me that there is something of this sort needed with the South. We must come to ourselves, and realize that our salvation is with ourselves, and with no one else, and of all the writers whom I have read after, Mr. Edward Atkinson

comes nearer the mark of what is the right thing to be done, in his letter published in your issue of November 9, than anyone else. I should like to attempt something in the way of an enforcement of his statements that "the true need of the South is to develop from within, and not from without," and that "the South needs to get rid of the idea that the government can supply it with money." It does seem strange that the South should be pointed to Kansas for an example of "thoroughly intelligent replies" from farmers to queries put to them by the secretary of the board of agriculture as to the economy of a certain course on their part. Why has Kansas thus gone so far ahead of the South in the intelligence, or capacity to write intelligently, on the part of her citizens? Possibly we may have to look long for an answer, and the statement that we are thus so far surpassed may be denied, but if it is a fact that this superiority exists, it is attributable solely to our having looked so long for our development to agencies without ourselves rather than to ourselves.

The necessity that existed for resisting the political slavery with which we were threatened was more real than Mr. Atkinson may be willing to admit, and this absorbed a vast portion of our strength and energy when they were badly needed elsewhere, but this none will ever fully understand except ourselves. Now that this danger seems to have passed away, there is still wanting with us much that a closer attention on our part of the true economy of the situation requires. Mr. Atkinson's allusion to the incompatibility of sheep-growing and the large crop of "curs" which we persist in raising and maintaining is certainly very much to our disparagement, if not to our disgrace.

In 1891 there passed through the iron-producing section of the South a party of Englishmen who were interested in that line, and one of them, when asked at the end of his trip what had most impressed him during his investigation of this feature of the South's wealth, bluntly replied, "the immense waste everywhere." And right here we have from a foreigner, and that, too, after only a cursory view of a limited portion of our section, a true description of our trouble—"waste everywhere." It was said in the early fall months of 1893 that as soon as the cotton crop could be gotten to market, that it would afford relief to the money market in the South, and doubtless this was true, temporarily, but this thing has been going on for nearly thirty years. Millions and hundreds of millions of money have come into the South and still her poverty remains, and we are told that the way out of it all is to send agents North, East and West to "advertise the resources of the South." Is there no danger of those agents being asked something about why we ourselves have not developed and enriched ourselves with some of these abounding resources?

God forbid that I should be thought an abuser of my own people; and what I would have done is that we should come to a realization, as did the Prodigal Son, that we must "arise" and start ourselves on the homeward journey to comfort and happiness, or we will surely perish with the swine around us. The question remains as to whether or not enough of our people, governors, legislators, judges, county supervisors and others can be aroused to the necessity of looking at the thing as Mr. Atkinson does, and it would seem as all reasonable men would, and to realize that "our development must be from within, and not from without;" to realize that there is something for public men and State officers to look after except their re-election to their present places, or to their promotion to higher places.

We know too well the depressed financial condition of everything in the South, and the total lack of capital with which to

start any large enterprise, but the large and successful enterprises of today in every country are those which had very meagre beginnings. If we cannot do anything else we can stop the "waste"—we can repair our fences, we can rebuild our roads and we can get ourselves out of debt, we can institute vast improvements in farming and other business methods, we can kill the "curs." Above all things, let us arouse ourselves to taking a livelier interest in what is absolutely necessary to our preservation as a people, and cease to look to any outside source for our advancement.

It is with pleasure that we notice the interest taken in a convention recently held in Richmond, Va., in the interest of good roads, and this matter should not be allowed to sleep, securing better roads than we now have being a necessity to the preservation of our civilization. Unless they are improved, "U. U." might bring millions of those people who he seems to think are on the move in the North; might bring them to the border of our country, and there they would have to stop when they saw the condition of the roads over which they must necessarily travel to reach that land of "abounding resources," left entirely undeveloped by the people of the country in which they exist, while such a prodigious development has gone on all around them.

In strong contrast with the apathy in all these matters on the part of our people stands out the activity and vigor of the men of the newly-formed Western States in their eager zeal to put into operation not schemes for getting people to come into their States, but to get millions and millions of money with which to make the large extent of arid lands within their borders, now too poor to support a good crop of prairie dogs—to get these lands, by means of irrigation, into a condition so that they will support a population. We stand looking on in idle indifference to everything apparently, except politics, the bane of our country, and, if I may be permitted to paraphrase the great poet, I should say, "A plague on all your parties." Let us set to work to "work out our own salvation," and leave the parties to take care of themselves.

There was never any better advice given than that of "Bill Arp" to the South soon after the close of the war, which was "that the first duty of the people of the South was to attend, each man, closely and diligently to his own business, and raise boy children." If we will only follow that now on the line Mr. Atkinson has marked out for us, as to lynching and everything else, we will yet, with the assistance of a kind Providence, attain, even during this generation, and surely those coming after us will enjoy a restoration of something of that "independence" which Scotland's bard so highly commends. God grant that it may be so. N. B. JOHNSTON.

APPLICATION will shortly be made for a charter for the Gulf Transit Co., of Pensacola, Fla., with a capital stock of \$200,000. Mr. M. H. Smith, president of the Louisville & Nashville Railroad, Louisville, is to be president, and W. H. Reynolds, secretary-treasurer. The company proposes to engage in exporting coal, coke, lumber and other domestic products from Pensacola, taking the place of the late Export Coal Co. The Louisville & Nashville Railroad Co. continues to prepare for a heavy export business at Pensacola, work being steadily progressing now on the new wharves and warehouses to replace the ones recently burned. The wharves will be lighted by electricity, so as to permit of loading by night, and the channel will be deepened sufficiently to allow the largest vessels to take on cargoes. Exports to Cuban ports will be greatly increased, and closer commercial relations with Mexico also will doubtless follow.



## A GREAT MANUFACTURING PLANT.

The Baltimore & Ohio Will Erect Over Fifteen Acres of Buildings at Cumberland, Md.

The improvements which the Baltimore & Ohio Railroad Co. intends making to its yards and shops at Cumberland, Md., will make that city one of the most extensive railroad-repair and construction centres in the United States.

The plans for the proposed improvements have been completed and the MANUFACTURERS' RECORD is prepared to give its readers some details of their dimensions. The roundhouse alone will be 305 feet in diameter and contain stalls for forty-four locomotives of modern type. In its centre will be a turntable large enough to accommodate an engine of any type. Adjoining it will be a blacksmith and machine shop 225x60 feet expressly for repairing locomotives. Near the roundhouse will also be water-tanks, also oil and waste storerooms. The repair and construction plant proper is to be located a few hundred feet from the roundhouse. It will include a machine shop 100x300 feet with a blacksmith shop annexed 80x100 feet, also a boiler shop and storage-house for parts of locomotive mechanism. The erecting shop will be 140x450 feet, and in it forty-four locomotives can be built at the same time. A second shop for engines of the largest class will be 140x250 feet, and in it thirty-six can be constructed at the same time. The shop for building and repairing freight cars will be 180x350 feet with a capacity of sixty-eight cars. The passenger cars will be built and repaired in two shops, each 150x450 feet. In addition to these buildings, five transfer sheds, each about 50x450 feet, a two-story office and storehouse 45x250 feet, a saw mill 70x250 feet, and a foundry 80x200 feet for iron and brass castings, also a pattern shop, are to be erected.

The buildings, all told, will cover over 650,000 square feet of surface, or nearly sixteen acres. All of the construction shops, the roundhouse and the machine shops will be built of brick with iron roofs, with iron architectural work wherever needed on the interior. The locomotive repair shops will be fitted with cranes, including several of five tons each, also the most improved machinery for this class of work. The machine shop will have a complete outfit of metal-working lathes, punches, drills, hammers, planes and other power apparatus, while the blacksmith shops will have the latest improvements in bellows, forges, etc. The plant for building locomotives will be one of the most complete in the country, fitted with all the apparatus necessary to finish passenger engines of from sixty to ninety tons and over. It is calculated to build most of the finer locomotives for the system here. The car shops will be among the most extensive ever designed for the purpose, and will include all the divisions for wood and iron work, painting and upholstering. The saw mill will be used for cutting logs and timber into boards and car-frame work, and will be supplied with circular, band and gang saws.

The yards, which will be located between the main line and the shops, will be divided into six sections, known as A, B, C, D, E and F. They will have a capacity for accommodating 655 coal and 2425 box cars, or about 3000 in all. With the switches, etc., several miles of track will be needed for them.

A careful estimate of the amount to be spent in buildings and machinery is \$950,000. The plant, when running at its full capacity, will need 2500 men.

EIGHT families from Dakota and seven families from Indiana comprise two parties of settlers who have just located in Alabama and Mississippi, respectively.

## Governor Fishback Tells of the Silver Lining to the Cloud.

STATE OF ARKANSAS, EXECUTIVE OFFICE, )  
LITTLE ROCK, December 7. )

Editor Manufacturers' Record:

The low price of cotton for the past few years and the prolonged financial depression are proving blessings in disguise to Arkansas farmers. They are now largely producing their own supplies, and some communities are exporting stock, hay, meat and vegetables and fruit. There have been no failures among our banks or business houses during the panic of sufficient importance to be remembered; at least, I fail to recall any. Immigration is pouring into Arkansas as never before in its history. Capital is beginning to find out that there are more "worms" for the "early birds" in this State than perhaps in any other State in the Union. It would be impossible to bankrupt a State so rich in resources as Arkansas. Money is exceedingly scarce, but farmers and country merchants are paying their debts, and not incurring new ones. Many of our farmers in portions of the State are holding back their cotton, and are able to do so since they have found out that there are many other crops more valuable than cotton.

WM. M. FISHBACK.

## The Middlesborough Steel Plant.

There is some prospect that after the many vexatious delays the Middlesborough (Ky.) steel plant will shortly be put in operation. The fires in the gas-producers have been started, and the gas was lighted in one furnace last week. The Middlesborough News, in giving an account of the matter, says: "It will require about ten days to dry out the furnaces and to complete the lining, which can only be done by heat. Several steel smelters from Pittsburgh have taken positions at the Middlesborough plant. Four of the twenty-four gas-producers are at work. Only one furnace is entirely ready for the gas. It is expected that in ten days this furnace will be ready for making steel. While the starting of this plant is to a certain extent an experiment, there is no experiment about the making of steel. The plant's continued operation depends solely upon the state of the steel trade and upon the degree of success with which the Watts Syndicate meets the disposal of its output. Should a ready sale for the steel be found the immediate operation of the six remaining furnaces will soon follow, and this will necessitate the starting of their two blast furnaces."

## Both Parties Committed to the Canal.

Watson & Gibson, bankers, of New York, in their financial letter of December 11 say:

"The republican platform of 1892 said: 'The construction of the Nicaragua Canal is of the highest importance to the American people, both as a measure of national defense and to build up and maintain American commerce, and it should be controlled by the United States government.' The democratic platform in 1892 said: 'For purposes of national defense and the promotion of commerce between the States, we recognize the early construction of the Nicaragua Canal and its protection against foreign control as of great importance to the United States.'

"There are indications that the democrats in Washington, wishing to avoid the reproach of a barren session, and desiring to enact some measure that will creditably mark the closing days of their present legislative reign, are disposed to press the Nicaragua Canal project. Republicans are committed to it, and would not like to have the democrats derive or claim sole credit for so popular a piece of legislation, so that republican assistance may be counted on. It would open a new field for

American labor, capital and enterprise, which are stagnating for lack of an outlet or impulse. We really believe that any legislation which will set men to work in Nicaragua would inspire fresh hope in the business community, and that it would mark the beginning of a better era in the industrial world."

## A Friend of the South.

The attention of the working classes to the South as a place for home-seekers has been strongly attracted on account of the recent convention of Knights of Labor in New Orleans. Among them was Grand Master J. R. Sovereign, who sends the following:

OFFICE OF GENERAL MASTER WORKMAN,  
ORDER OF KNIGHTS OF LABOR,  
DES MOINES, IOWA, December 3. )

Editor Manufacturers' Record:

I am very much pleased with many portions of the South, and avail myself of every opportunity to recommend it to parties seeking homes and locations for manufacturing, etc.

J. R. SOVEREIGN.

## Want Immigrants for Arkansas.

A colonization company with \$1,000,000 capital has been formed at Little Rock, Ark., with C. N. Knight, president; C. H. Coffin, vice-president; Maxwell Coffin, W. H. Ragland and others, directors. Arrangements have been already perfected to secure the introduction into the State of desirable people from England and Germany. The organization of this colonization company is for the purpose of facilitating that movement. It is also the design of the organization to make the resources of Arkansas, particularly those in that portion which the proposed Little Rock & Pacific road will operate, well known in all sections of the United States and foreign countries from which it is possible to draw a desirable class to aid in rapidly developing that territory.

## Two Tinplate Plants and New Iron Furnace.

The Stickney Iron Co., of Baltimore, has decided to include the manufacture of tinplate in its operations, and one of the company informs the MANUFACTURERS' RECORD that one of the present charcoal-iron furnaces will be rebuilt for this purpose. The company may eventually build mills at Canton. George H. Stickney and William Harvey are interested.

Arrangements are being made to enlarge and put in full operation the tinplate mill at Locust Point, Baltimore. More machinery has been purchased from the Totten & Hogg Steel & Iron Foundry Co., of Pittsburgh. Between 250 and 300 men will be employed. Matthai, Ingram & Co., of Baltimore, who are interested in the works, will use much of the plate in making tinware at their shops, near the mill.

## The Florida Kaolin Deposits.

A correspondent of the MANUFACTURERS' RECORD, writing from Valaba, Fla., confirms the report of extensive kaolin beds in that locality. One deposit has been opened at Richmond, near Valaba, which is of a very superior quality. A tract of fifty acres recently sold for \$1200.

## A Big Steel Plant.

As stated in our editorial columns, the partly-finished steel plant at Alexandria, Ind., the New Albany (Ind.) Rail Mill and a Belleville (Ill.) steel plant have been purchased, and will be united in one enterprise at Alexandria, Ind. This will carry out, but on a larger scale, the plan started by the New Albany Rail Mill Co., prior to the panic last year, of establishing a very extensive steel plant at Alexandria. Some of the parties interested in the syndicate are Wm. F. Neidringhaus, F. Oliver and

others already heavily interested in iron and steel. The capacity of the new plant at Alexandria will be 1700 carloads per month; the Bessemer steel plant alone is to have an output of 100,000 tons of steel per annum, and about 1600 men will be employed. This consolidation will, it is stated, make this new mill one of the largest in the country.

## GENERAL NOTES.

## Brief Mention of Various Matters of Current Interest.

THE zinc ores in Marion, Boone, Baxter and Searcy counties, Ark., are reported by Geologist Branner to average 65 per cent. of zinc.

ORANGE-GROWERS near St. Francis, Fla., have begun shipping the fruit direct to Europe through the Florida Fruit Exchange, instead of sending it to the Northern markets for sale.

THE government canal commission to select the best route for a deep-water canal between Delaware and Chesapeake bays has chosen what is termed the Back-creek route, near the line of the present canal.

ANOTHER passenger steamship is to be put on between Mobile and the West Indies. The Plant Company's liner Oliveette is to run regularly between those ports this winter, stopping at Tampa, Fla.

THE Southern Malleable Iron Co. states that it recently sold a railroad company 400 car couplers, where last year the same company ordered but one. Recently it sent to a Northern car works six carloads of couplers. This shows how successfully Southern industries can compete with those elsewhere.

A LETTER from Dahlonaga, Ga., to the MANUFACTURERS' RECORD says: "Judge W. W. Murray has bought and is adding ten more stamps to his mill near this place, and has opened up what seems to be one of the largest deposits of good-paying ore that has been discovered in years. If this find was in the far West thousands of men would flock to the place, and no amount of danger or fatigue would keep them away."

ANNISTON, ALA., is rejoicing in the reorganization of the Woodstock Iron Co. and the impetus to be given local business by the resumption of the company's furnaces. At a meeting of the stockholders of the company Wm. G. Ledbetter was elected president; Hoffman Atkinson, secretary, and James W. McCulloh, treasurer. The two furnaces of the company are to be repaired and put in blast as soon as is justified by the iron market. The company will issue \$250,000 of bonds to provide funds for repairs and for working capital.

THE Rocky Mount (N. C.) Argonaut, the editor of which has for many years been interested in mining matters, says: "Having a pretty wide and varied experience in the mining business, we feel positive that the same or a less amount of money invested in North Carolina that it would take to put a West Australian mine on a paying basis would bring in larger and surer returns. Out there the expenses of working are several hundred per cent. greater than here, and although our big gold mines may be low grade, capital combined with a knowledge of the business will put many of them in the front ranks as gold-producers. In a wild, remote and unsettled country like West Australia mining is bound to be a gamble. Here it can be made a strictly legitimate business as manufacturing or merchandising. In spite of its bodies of immense reefs of almost solid gold, we still maintain that North Carolina offers greater inducements to the careful, conservative investor than does Australia."



## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 307.]

## MORE RAPID TRANSIT.

Over 160 Miles of Electric Lines Planned In and Around Baltimore.

Baltimore has entered another period of activity in electric-railway building, and by April 1, 1895, companies organized in this city will probably have built more street, suburban and interurban electric roads than around any other city in this country within a period of three years.

In its issue of April 27 the MANUFACTURERS' RECORD published an article showing that at that time about eighty miles of electric and cable lines were under contract to be completed by September 1, and that no less than \$15,000,000 capital had been invested in these enterprises within three years.

At present fully 164 miles of road for electric motors are either under construction or planned by combinations of responsible parties to traverse the country near Baltimore and within the city limits. Here is a list of the enterprises in detail:

Electric system from Baltimore to Gettysburg. This is planned by the Baltimore Traction Co., and will be formed by a combination of lines built via Pikesville, Emory Grove and Westminster, Md., to Gettysburg. About twelve miles are completed, leaving fifty-one to be built. Companies have been formed covering the entire route.

Baltimore & Washington Boulevard Co. This line is via Laurel, Md., and is about thirty-two miles long. It will be double track, rock ballasted and operated by 100 horse-power motors, as stated in the MANUFACTURERS' RECORD of December 7; estimated cost \$1,000,000. David M. Newbold is president.

Edmondson Avenue, Catonsville & Ellicott City, ten miles. John Hubner, of Catonsville, is back of this project. This line will probably be double track, with at least one power-house. The trolley system will be used.

Baltimore Traction Co., changing of Gilmore street and Druid Hill avenue cable lines to trolley systems. Will require the electrical equipment of about nine miles of double-track line, also wire and poles. Hon. Frank Brown is president. The Traction Company has also planned the following extensions: To Clifton Park by way of Waverly, to Mount Washington from its Pikesville section, and to Westport with its Ridgely street division. An extension of its Curtis Bay division of 2000 feet is in progress.

City & Suburban Railway Co., extension to Clifton Park from its York road division; also equipment of its Catonsville line, six miles, with the trolley system. Nelson Perin is president.

City Passenger Railway Co., extension of its Homestead trolley system. Joseph H. Rieman is acting president.

Mount Washington Electric Railway Co., to build two miles of trolley road into Mount Washington to connect with the Baltimore Traction lines. George R. Webb and William G. Hatter are interested.

Clifton Park Electric Railway Co. W. J. Taylor and Eben B. Hunting are among the principal promoters. The line is to be between three and four miles long, extending east from a point near Roland avenue north of the city line to Clifton Park. It will be a double-track trolley road, and may have its own power station.

Baltimore, Middle River & Sparrow's Point Co., proposed line of fifteen miles between the points named. Grading has begun on this road, which will be equipped with the trolley system and may generate its own power. George R. Willis, F. W.

Trimble and Charles B. McLane are actively interested.

Baltimore, Severn Park & Annapolis Co., to build a trolley road twenty-eight miles long, with one power station. It is to extend from South Baltimore to Annapolis by way of Severn Park. The company is to be capitalized at \$250,000. Bready Bros., contractors; G. Howard White, a real-estate operator, and D. S. Collett, another contractor, are interested in forming the company.

To summarize the various construction projects, they comprise the following:

	Miles.
Baltimore-Washington.....	32
Baltimore-Gettysburg.....	51
Baltimore-Ellicott City.....	10
Changes cable to trolley in the city.....	9
Extension to Mount Washington and Clifton Park.....	5½
Extension to Curtis Bay and Westport.....	2
Mount Washington independent line.....	2
Clifton Park Company.....	3½
Baltimore-Sparrow's Point.....	15
Baltimore-Annapolis.....	28
City & Suburban, Catonsville line.....	6
Total.....	164

Estimating the expense, including three power stations for the Washington-Baltimore line, two for the Gettysburg, one for the Ellicott City road and one each for Sparrow's Point and Annapolis roads, a total of \$3,245,000 will be spent on this work. This is calculated on experts' figures. The additional rolling stock (included in the cost of construction) will be 124 motor cars from forty to 100 horse-power each.

One noticeable fact is that most of the companies noted above are composed of Baltimore capitalists. The Mount Washington, the Clifton Park and the Annapolis projects represent local capital altogether. This shows that Baltimore people are rapidly becoming interested in suburban development, and are appreciating the value and importance of rapid transit.

## The Intercontinental Road.

Mr. W. H. Brooker, of San Antonio, one of the principal promoters of the San Antonio & Gulf Shore road, now being constructed from San Antonio to Velasco, Texas, writes to the MANUFACTURERS' RECORD of the proposed railway to connect North and South America. He states that he has thoroughly examined the country from Texas to the Amazon river, and advocates the plan as follows:

"The lower Rio Grande valley for 100 miles north is the richest soil in America, level and alluvial, on which grow nearly all the tropical fruits and vegetables, oranges, bananas, lemons, citrons, sugar-cane, and, indeed, everything that can be grown in a semi-tropic land. Much of this valley is susceptible of irrigation and a high state of cultivation. But whatever is raised there must be consumed at home, as there are no transportation facilities, and it is 275 miles from this city.

"Fifteen years ago I contemplated a network of railroads centering at San Antonio and diverging in various directions. The contemplated road to Brownsville, Texas, was then, as now, in my mind a link in the great intercontinental line running from this city, as the North American distributing centre, down through the eastern coast of Mexico, skirting the rich alluvial lands therein; thence on through Guatemala, Honduras, Costa Rica, the Isthmus of Panama, through the States of the Argentine Republic and South America, crossing the Amazon at the head of navigation, one line diverging down the fertile valleys to Rio de Janeiro, in Brazil; another over the rich pampas and fertile tablelands of South America to Buenos Ayres, two of the largest cities on that continent.

"I once submitted my ideas to the younger Garrett, of the Baltimore & Ohio Railway, and he lent a willing ear, but said he must first get his own system under way. This project is not visionary any more than was that of Galileo, or the hope of Columbus. This great system of railroads, when

built, would never have competition. Its commerce would never be blockaded with snow; its traffic would be enormous from construction. The line can be cheaply constructed; large concessions can be obtained from the countries through which the road may run in aid of its construction."

## More West Virginia Lines.

[Special Correspondent, MANUFACTURERS' RECORD.]  
CHARLESTON, W. VA., December 12.

There has been considerable activity in railroad matters in West Virginia the past two weeks. The most important item of railroad news is the result of the election in Summers county, by which the taxpayers of the county agreed to subscribe \$30,000 to the capital stock of the Hinton & New River Railroad Co. This company was chartered two years ago for the purpose of building a road from Hinton, on the Chesapeake & Ohio, to Glen Linn, in Mercer county, on the Norfolk & Western. The officers are: President, J. T. McCreery, Hinton, W. Va.; secretary and treasurer, J. Alex. Parker, also of Hinton. These gentlemen talked up the value of such a road till they induced New York capitalists to agree to take a percentage of the stock so soon as the local interests came forward sufficiently to show their good faith. The local land-owners and merchants did very well, and the subscription of \$30,000 made by Summers county finished out the local quota of stock, insuring the building of the road. Work is expected to begin about February 1 if the weather will permit.

The road begins at Hinton and follows New River valley all the way to Glen Linn, about twenty-six miles. A branch will start from the main line at the mouth of the Bluestone river and follow that stream and Piney creek into Raleigh county, thirty miles. This branch reaches the celebrated Flat-Top coalfield. The main line follows the New River coal seam, equally well known and by many regarded as the best steam, smithing and coking coal in the South, throughout its length. Both lines are flanked by virgin forests of hardwood. The road will also open connection between two of the most important railroad systems in the country, and will shorten the distance between points in some instances 300 miles.

The latest electric road projected is a line from Grafton, this State, to Pruntytown. It has good backing among solid business men, and will pass through enough good-sized towns and hamlets to make it pay. Another trolley scheme which is taking shape is to connect a number of good towns in Preston county.

The Monongahela River Railroad Co. is building an independent connection between its terminus and the Fairmont union station, which it has heretofore reached over the Baltimore & Ohio.

It is reported on good authority that the Flat-Top Coal Land Association is planning with the Chesapeake & Ohio for a branch line to its property, which is now entirely dependent upon the Norfolk & Western.

The West Virginia Central & Pittsburg management is again branching out in the same general direction their enterprise was taking two years ago. One scheme is to secure a better coal outlet to tidewater, and another is to cut down through Randolph, Pocahontas and Greenbrier counties to the Chesapeake & Ohio, developing the remarkable natural resources of those counties as it goes. Engineers have been working to the east the past month, and another corps is at work on the southern extension. The latter are said to have found a pass through the mountains never before known, which greatly shortens the route and removes the necessity for heavy grading and tunnelling. It is not likely anything tangible will be done by these people this winter, but many people will be deceived

if they are not at work in the spring on both branches.

The Cheat River Railroad surveys are being pushed forward. The road is to run from Point Marion, Pa., to Rowlesburg, W. Va., along Cheat river nearly 100 miles.

The Fairmont, Morgantown & Pittsburg Company is relaying that part of the line from Morgantown to Fairmont with new steel rails.

It is reported on moderately good authority that the Ohio River Railroad will be extended from Huntington to Ashland, Ky., to connect with the Lexington branch of the Chesapeake & Ohio.

## A 230-Mile Line.

A railroad project of the utmost importance to Arkansas and the Southwest is the Little Rock & Pacific, which is planned to be built from Little Rock along the south side of the Arkansas river to Wister Junction, I. T. While it is to be 230 miles, the MANUFACTURERS' RECORD is pleased to note that some of the wealthiest citizens of the State are in the company, of which Gov. W. M. Fishback is president. The directors include D. Fones and W. B. Worthen, two Little Rock bankers worth from \$200,000 to \$300,000 each; G. W. Clark, of the Muskegon Lumber Co., having \$500,000 capital; W. H. Ragland, of Ragland & Coffin, bankers, and Charles N. Rix of the Arkansas National Bank of Hot Springs. Five per cent. of the capital, \$4,600,000, has been paid in, and the commercial bodies of Little Rock have agreed to give \$200,000 in stock subscriptions and forty acres of land for terminal yards, right of way, etc., in the city limits.

The road, if built, will connect the Little Rock & Memphis with the Choctaw, Oklahoma & Gulf, now being extended by Philadelphia capital to the coalfields of the Indian Territory. The new line, aside from developing a heavily-timbered and fine farming country, would be the Eastern outlet for this coal territory, which is one of the most extensive areas in the United States, while it would form part of an Eastern and Western system, which, as already stated in the MANUFACTURERS' RECORD, could reach to the Atlantic seacoast by a connection with the Southern or Seaboard Air Line. The syndicate of bankers and others forming this company state that they have secured the agreement of English investors to take a large interest in the company as soon as the people in the towns along the route subscribe their share.

## An Important Short Line.

Regarding the Savannah Terminal & Railroad Co. recently incorporated in that city, Mr. Pope Barrow, one of the directors of the company, gives the MANUFACTURERS' RECORD a description of its plans. It owns 120 acres of land on the river front, with seventeen feet of water close to the shore, which will be increased by the government dredging to twenty feet. The three miles of railroad to be built will connect with every railroad of importance now entering Savannah, and will be the natural terminal point of the Savannah, Americus & Montgomery when that line is extended to the city. The property will be valuable for wharves and warehouses.

## To Enter Louisville.

The present indications are that the Illinois Central will enter Louisville in the near future over the Chesapeake, Ohio & Southwestern Railway, which it now controls, and which, according to Chicago dispatches, is to be made a part of its system. It is understood that the Chesapeake, Ohio & Southwestern, which extends from Louisville to Memphis, is to be shortened about twenty miles and relaid for fifty miles with heavier rails. The Central



holds a majority of Chesapeake, Ohio & Southwestern bonds.

#### Excessive Freight Rates.

The MANUFACTURERS' RECORD has received several reports that excessive freight rates were being charged on cotton, especially by companies shipping to St. Louis. Mr. Jerome Hill, of that city, one of the leading cotton dealers, states the schedule of rates is unjustly high, and calls the attention of the MANUFACTURERS' RECORD to the following protest made by the St. Louis Cotton Exchange:

"We agree with the merchants that in consideration of the great decline in all agricultural products, freights on them are now, proportionately with their value, much too high. From many points south of us a rate of \$4.00 per bale is charged on cotton, and this amounts to the absolute confiscation for the freight of one out of every shipment of six bales. A shipment of thirty bales of cotton lint from the Indian Territory to St. Louis absorbed ten bales, or one-third of the shipment, in payment of the freight. The claim that the value of the commodity was great and the fire risk also great has formerly influenced the railroad companies to maintain a high rate of freight on cotton. With the value per bale reduced to about \$25.00 at the shipping point, the cost of insurance taxes the railroads only a few cents, say, less than five cents per bale. So the matter of value and risk of fire should not now be used as an argument to maintain on the tariffs rates which were established and used when cotton was worth \$50.00 and \$60.00 per bale, or double its present value.

"With old rates still maintained, while cotton now is half its former value, we find, on the other hand, that all expenses of maintaining a railroad are greatly reduced. Railroad iron, formerly \$80.00 per ton, is now about \$22.00. The cost of labor and the salaries of employees are greatly reduced. The interest to be earned and paid on bonds was formerly 7 per cent. and more; now they require only 4 to 5 per cent. Also, new and improved methods and machinery make fewer men necessary to handle trains. The logic of existing facts requires reductions in the freight charges of this great staple."

#### No Change in Chesapeake & Ohio Coal Freights.

Recently the Ohio Coal Trade Association made a reduction to \$2.25 per ton on coal to Mississippi river, claiming it was forced to do so by West Virginia and Kentucky coal operators. Regarding this action Traffic Manager Walker, of the Chesapeake & Ohio, writes to the MANUFACTURERS' RECORD that his company has made no change in rates, and at present does not consider that any change is required.

#### Railroad Notes.

The Georgia Southern & Florida has received 100 fruit cars for use in its orange-shipping trade to the North and West.

EDGAR HILL has been appointed traffic manager of the Louisville, St. Louis & Texas, with headquarters at Louisville.

THE Dallas Rapid Transit Co.'s street railway has been sold to W. F. Thayer, E. A. Studley and others. The road is about ten miles long.

THE Georgia legislature has decided that the Northeastern Railroad shall be sold to settle the amount due the State, \$260,000. It extends from Athens to Lulu, Ga.

E. E. CARPENTER has resigned his position as general manager of the Gulf & Interstate road being built by the populists, and has been succeeded by Fox Winnie, of Newton, Kans.

The passenger department of the Iron Mountain system, through the general passenger agent, has issued an attractive

pamphlet giving a brief description of Hot Springs, Ark., and a guide to the local hotels.

THE Atlantic Coast Line has added the Wilmington, Chadbourn & Conway to its system. It has been leased to the Atlantic Coast Line for several years, but a sale has been made for \$53,000. The line is fifty-three miles long, extending from Conway, S. C., to Chadbourn, N. C.

PRESIDENT THOMAS A. MCINTYRE and other officials of the Wilmington, New Berne & Norfolk have been elected directors in the Wilmington Street Railway Co. This will probably give the Wilmington, New Berne & Norfolk the use of the street railway company's dummy line and improve its terminal facilities.

ACCORDING to the annual report of the interstate commerce commission, just issued, there were 176,461 miles of line in the United States June 30, 1893, an increase over 1892 of 4897. The capitalization of the roads reporting was \$10,500,235,410. The number of passengers carried was 593,560,612, and the number of tons of freight carried was 745,119,482. The gross earnings were \$1,220,731,874, the operating expenses \$827,921,299, leaving net earnings of \$392,830,575, which is equivalent to \$2314 per mile of line.

IN accordance with the Richmond Terminal plan of reorganization, the Maryland Trust Co., of Baltimore, offers to the holders of Charlotte, Columbia & Augusta first-mortgage 7 per cent. bonds due January 1, 1895, who shall present same at its office on or before December 20, 1894, the privilege of extending them at 5 per cent. per annum for fifteen years from July 1, 1894, upon payment of 2½ per cent. upon the amount of bonds so extended. Thus the holder of a \$1000 bond, upon presenting it for extension, will receive a \$1000 extended 5 per cent. bond, carrying coupon due July 1, 1895, and \$10.00 in cash. Those who do not wish their bonds extended upon these terms may have them purchased at par and accrued interest to date of maturity by presenting them on or after January 1, 1895, at the office of the Maryland Trust Co.

MR. M. V. RICHARDS, who was so recently appointed by President Samuel Spencer to the office of land and immigration agent of the Southern Railway, has issued a very interesting and commendable circular with respect to the work of his department. He says: "The country tributary to the Southern Railway is full to repletion of natural resources, which need only to be developed to produce great wealth and enduring prosperity to its possessors. There are the most ample opportunities for all classes of people, whether they be farmers, fruit-growers, vine-growers, truck-gardeners, stock-raisers, manufacturers, miners in gold, iron and coal, lumbermen, merchants, mechanics or other business men. The country is full of inexhaustible riches, is capable of sustaining millions of people, and is the most inviting field for immigrants of any section of our great country. The Southern Railway Co. has organized a land and immigration department for the express purpose of placing before the public the advantages and opportunities offered by the section of the country tributary to its lines, with a view of increasing the settlement and developing the industries of the States through which it passes." Mr. Richards urges all interested in Southern development to co-operate with his company by offering inducements to homeseekers in every way possible.

JOHN P. PRUSS, of Little Rock, president of the Arkansas Farmers' Alliance and Industrial Union, has called a meeting of cotton-growers from every county-seat to make an estimate on the cost of production and agree upon the price at which cotton should be sold in 1895, and to organize a permanent cotton-growers' alliance.

## FINANCIAL NEWS.

#### New Financial Institutions.

A new bank is being organized at Louisville, N. C.

A movement is on foot to organize a local insurance company at Newport News, Va. Richard Walsh is interested.

The Carolina Mutual Fire Insurance Co., is being organized at Charlotte, N. C., by P. M. Brown, C. F. Jones and others.

A branch of the Equitable Building and Loan Association of Augusta, Ga., has been organized at Sanford, Fla., with Forrest Lake, president.

The Red River National Bank of Clarksville, Texas, has been organized with M. L. Sims, president, and D. W. Cheatham, cashier. The capital stock is \$50,000.

The Guardian Insurance Co. has been organized at Bristol, Tenn., with John C. Anderson, president; H. C. Wood, vice-president, and W. S. Stuart, secretary.

The Guardian Fire Insurance Co. is being organized by Sumter Cogswell, of Memphis, Tenn. It is proposed to secure 1000 subscribers to the capital stock of \$400,000.

A new bank will commence business at Glade Springs, Va., on January 1, 1895, with General Greaver, of Smyth county, as president, and M. M. Morris, of Glade Springs, as cashier.

The Atlantic Permanent Building & Homestead Association has been incorporated by William H. Milnor, Charles C. McColgan, Wm. F. Seim and others. The capital stock is \$650,000.

Bills have been introduced in the South Carolina legislature to incorporate the Germania Mutual Life Insurance Co. of Charleston, Farmers' Mutual Insurance Association of Fairfield County, Equitable Fire Insurance Co., Farmers' Mutual Insurance Co. of Florence County, Farmers' Mutual Insurance Co. of Oconee County, and similarly titled companies in Darlington and York counties.

#### Interest and Dividends.

The Bank of Warrenton, Ga., has declared an annual dividend of 8 per cent.

A dividend of 3 per cent. has been declared by the Central Passenger Railroad Co., of Baltimore.

#### New Bond and Stock Issues.

A bill has been introduced in the South Carolina legislature to authorize Sumter county to issue \$15,000 of bonds to pay off indebtedness and for improving the courthouse.

At an election held at Columbus, Ga., to vote on an issue of bonds to build new water works, the proposition was defeated, as it failed to receive two-thirds of the number of votes cast.

The Woodstock Iron Co., of Anniston, Ala., which is being reorganized, will issue \$250,000 of bonds for improvements and working capital. William G. Ledbetter is president of the company.

The bill introduced in the South Carolina legislature authorizing the county of Greenville to issue bonds in aid of the Atlanta & Richmond Air Line Railroad Co. has been favorably reported.

Bills have been introduced in the Alabama legislature authorizing Eufaula to issue bonds for funding its present indebtedness and to authorize Barbour county to issue \$90,000 of bonds to fund its bonded debt.

An unfavorable committee's report has been submitted on the bill introduced in the South Carolina legislature authorizing the town of Clío to issue bonds in aid of the extension of the Latta Branch Railroad.

The election held at Pensacola, Fla., to vote on the proposition to issue \$60,000 of funding certificates resulted in a defeat of the measure by a tie vote. The present

bonded debt of the city is \$248,000, and the taxable basis is \$3,500,000.

#### Financial Notes.

A BILL has been introduced in the Georgia legislature to amend the charter of the South Georgia Bank of Way Cross, enabling it to conduct a savings department.

#### Literary Notes.

A FASCINATING new book by Joel Chandler Harris is published by Houghton, Mifflin & Co., Boston, Mass. It is splendidly illustrated, and offers to the young folks no end of amusement. It tells all about "Little Mr. Thimblefinger" and his queer country. The illustrations are plentiful and well executed, and the up-to-date fairy tales are told in fetching style.

"THE LAST LEAF," a poem by Oliver Wendell Holmes, has been published in dainty style by Houghton, Mifflin & Co., of Boston, Mass. It is one of the earlier productions of this gifted author, but the theme is an enduring one, and its central figure may readily find its prototype. A leaf clings to the bough, notwithstanding the rigors of autumn and winter, till the new growth of spring is spreading its foliage all around it. The poet deftly pictures a human life at its sunset, and draws the contrast with the leaf in a way that kindles emotions of admiration, pity and reverence. In a recent letter to his publishers, referring to the poem, he calls himself one of the very last leaves which still cling to the bough of life that budded in the nineteenth century.

THE vigorous life of the farmer's boy, with its rounds of toil, of pleasure and happiness, is sketched in effective style in an attractive book, the "Farmer's Boy," by Clifton Johnson, author of the "Country School in New England." Rustic life is abundant in incident, and how the boy fares proves an interesting story. With what feeling of envy must the city lad note the pastoral beauty of meditations by a streamside, in which the frontispiece finds two farmers' boys engaged. Fishing and skating, rambling through the fields, "playing Indian," fun in a boat, catching flood-wood, in swimmin', cutting names in a tree-trunk, shooting with a sling and no policeman for miles, conquering a young colt, warming before a cheerful log-fire—such is only part of the prospect photographed with faithful accuracy in this readable book. Glancing over the charms of country life as set forth, the city boy will find an awakening of admiration for country life and a deeper respect for the farmer's boy. D. Appleton & Co., New York city, are the publishers.

Who has not felt the pathos, the rollicking spirit and abundant optimism characterizing the simple and earnest bits of poetry that have been floating through the newspapers for the past several years from the pen of Frank L. Stanton. In the profusion of profound sophistry and mystical science which envelops many of the poets of the day, making their productions too ponderous and pessimistic for the every-day mind, what a refreshing relief it is to run across the joyful tidings of "Not Melancholy Days," or smack your lips in envy over "Possum and Taters," or to note the inspiring voice of nature in a "Day Off," to enthrall with a "Watermelon Song," to feel the benediction like oil on troubled waters of "A Song of Life," or catch the aint-a-botherin'-me refrain of "A Country Philosopher." To read one of Stanton's poems is to stir up impulses of hope and joy, and to share the never-failing store of good nature, brotherly love and optimism which flows so gracefully from his fluent pen. Georgia is proud of him, the South is honored in his possession and the hearty welcome his poems receive at home and abroad is creditable to American literature. As is well known, Mr. Stanton is a writer on the staff of the Atlanta Constitution, and his department, "Just From Georgia," receives wide quotation. D. Appleton & Co., of New York city, have just issued a collection of Mr. Stanton's poetry, embracing over 100 poems, and under the apt title of "Songs of the Soil."



## SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 306 and 307.]

**\$6,000,000 IN NEW MILLS.****The South Vigorously Pushing Its Cotton-Manufacturing Interests.**

**Mills Under Construction or Contract for 285,000 Spindles, and Projected for 140,000 More.**

The South is waking up to the importance of cotton manufacturing as a factor in its progress. Cotton mills are being enlarged, and new cotton mills are being built. Many of the strongest and notably most successful companies in the South are increasing their capacity by adding more machinery, while others are building entirely new mills. The Pelzer Company, of South Carolina, for instance, is building a 50,000-spindle mill, which will give that company about 100,000 spindles; the Gaffney Manufacturing Co., of South Carolina, is building a \$425,000 mill, and the Clifton Company, close by, has just voted to build its third mill with a capacity of 18,000 spindles. North and South Carolina are pressing each other closely for first place, with present prospects in favor of the latter; Georgia is making a good third, while Alabama is taking new interest in its textile interests.

The mills now under construction in the South and the additions to old mills represent a capital of about \$6,000,000 that is being added to the total investment in Southern cotton mills. These new mills and enlargements will require 285,000 spindles and about 6000 looms. A number of new mills are projected, and companies are being organized to build them, but they are not included in the foregoing. These projected mills, counting only such as are reasonably sure to be built, will require about 140,000 spindles, and cost about \$2,500,000.

One of the most striking signs of the times is the building of Southern mills by the strongest New England mill companies, thus fulfilling the statements often made by the MANUFACTURERS' RECORD. The Massachusetts Mills Co., of Lowell, lately voted to organize a \$600,000 company to build a mill in the South, and now the Dwight Manufacturing Co., of Chicopee Falls, has voted to build a \$500,000 mill in Alabama. These are two of the strongest mill companies in New England. Their action means that several of their competitors must follow suit, and build mills in the South.

When the mills under construction and the enlargements now under way have been completed, the South will have over \$105,000,000 invested in its cotton mills, with about 3,000,000 spindles and 70,000 looms.

The following condensed statement of the mills under construction and projected will be of interest in this connection:

Greenville, S. C.—\$100,000 company organizing; over \$50,000 subscribed.

Greenville, S. C.—\$100,000 company organizing; over \$50,000 subscribed.

Greenville, S. C.—\$100,000 company organizing.

Blacksburg, S. C.—Cherokee Falls Manufacturing Co.; rebuilding after fire; 6600 spindles, 160 looms.

Lockhart Shoals, S. C.—Lockhart Shoals Manufacturing Co.; now erecting buildings; 20,000 spindles.

Winston, N. C.—\$100,000 company organizing.

Chattanooga, Tenn.—Hamilton Cotton Mills; now organizing.

Central, S. C.—\$100,000 company organizing.

Pelzer, S. C.—Pelzer Manufacturing Co.; now erecting buildings for additional mill; 50,000 spindles, 1600 looms.

Atlanta, Ga.—Exposition Cotton Mills; now erecting buildings for additional mill; 20,000 spindles, 650 looms.

Alabama.—The Dwight Manufacturing Co., of Chicopee Falls, Mass., has voted to spend \$500,000 in building a cotton mill in Alabama, probably near Gadsden.

Stubbs, N. C.—Buffalo Manufacturing Co.; 4000 spindles.

Lincolnton, N. C.—J. A. Abernethy; now building; 5000 spindles.

Laredo, Texas.—Laredo Textile Manufacturing Co.; projected.

Bessemer City, N. C.—Bessemer Cotton Mills; buildings ready for machinery; 15,000 spindles, 336 looms.

Weldon, N. C.—W. M. Habliston and others; work about to commence; 20,000 spindles.

King's Mountain, N. C.—Crowder's Mountain Manufacturing Co.; nearly completed; 300 looms.

Gaffney, S. C.—Gaffney Manufacturing Co.; now building additional mill to cost \$425,000; 25,000 spindles, 660 looms.

Charlotte, N. C.—Atherton Cotton Mill; addition now building; 5000 spindles.

Dalton, Ga.—Crown Cotton Mills; addition now building; 4500 spindles, 176 looms.

Charlotte, N. C.—Charlotte Oil & Fertilizer Co.; now building batting plant.

Wellford, S. C.—Tuckapau Mills Co.; now building mill; 10,000 spindles.

Rockingham, N. C.—Midway Mills; now building addition; 3000 spindles.

Graniteville, S. C.—Graniteville Manufacturing Co.; new machinery to cost \$40,000.

Nesbitt, N. C.—Nesbitt Mills Co.; charter issued; capital \$200,000.

Concord, N. C.—Odell Manufacturing Co.; addition now building; 1800 spindles, 54 looms.

Laurinburg, N. C.—Robt. E. Lee; will build; 5000 spindles.

Camden, S. C.—Camden Cotton Mills; buildings completed, but machinery not put in; 12,000 spindles, 350 looms.

Augusta, Ga.—Globe Cotton Mills; added 50 looms.

Fort Mill, S. C.—Millfort Manufacturing Co.; added 100 looms.

Atlanta, Ga.—Company to be organized; proposed \$350,000 mill.

Raleigh, N. C.—Melrose Cotton Mills; projected; \$100,000 stock.

Hall's Mill, N. C.—O. P. Heath and others; contract let for buildings; 100 looms.

Concord, N. C.—G. W. Patterson Manufacturing Co.; buildings commenced; 3000 spindles, 60 looms.

Batesburg, S. C.—Batesburg Cotton Mill; buildings ready for machinery; 200 looms.

Newberry, S. C.—Newberry Cotton Mills; building addition.

Abbeville, S. C.—\$100,000 company proposed.

Edgefield, S. C.—Dunkirk Cotton Manufacturing Co.; proposed.

Raleigh, N. C.—Caraleigh Cotton Mills; to add 3000 spindles, 100 looms.

Augusta, Ga.—Sibley Manufacturing Co.; new building and machinery decided.

Anniston, Ala.—Anniston Manufacturing Co.; new building and machinery to cost \$50,000.

Bath, S. C.—\$300,000 company organized and to build, but have not commenced yet; 15,000 spindles.

Chester, S. C.—Catawba Mills Co.; to add 5000 spindles.

New Orleans, La.—Company being organized; to make fine grades.

New Berne, N. C.—\$100,000 company proposed.

Clifton, S. C.—Clifton Manufacturing

Co.; to build a third mill; 18,000 spindles, 600 looms.

Americus, Ga.—Company proposed; 8000 spindles.

Gastonia, N. C.—Modena Cotton Mills; 2500 spindles.

Atlanta, Ga.—W. J. Willingham and others to build a \$200,000 mill.

Massachusetts Cotton Mills, of Lowell, to build a 50,000-spindle mill in the South.

**Cotton Mills in Spartanburg County, South Carolina.**

The value of cotton manufacturing to all the interests of any section is probably nowhere better illustrated than in Spartanburg county, S. C. Not many years ago Spartanburg county had comparatively few cotton mills, but within the last seven or eight years the growth of cotton manufacturing in that county has made it the leading county in the entire South so far as the number of spindles is concerned. In a recent issue of the MANUFACTURERS' RECORD a letter was published showing that the building of these cotton mills had created a home market for the production of local farmers and a home market for all the surplus labor of the county to such an extent that hard times were not being felt in that region. The value of this cotton industry is again emphasized by the tax assessor's returns of property. The assessed value of the factories of Spartanburg county is \$3,404,250 out of a total assessed valuation, including real estate and railroads, of \$10,734,665. The assessed value and taxes of the cotton factories of the county are as follows:

	Assessed value.	Taxes paid.
Clifton.....	\$562,750	\$12,078 50
Pacolet.....	788,905	11,044 67
Enoree.....	424,800	5,947 20
Spartan Mills.....	373,770	6,073 76
The Converse Co.....	277,100	3,829 40
Whitney.....	170,970	2,393 35
Gaffney.....	113,000	1,582 00
Pelham.....	90,900	1,272 60
Cowpens.....	45,900	642 60
Beaumont.....	45,000	731 25
Fairmont.....	42,500	595 00
Fingerville.....	34,000	476 00

Thus, notwithstanding the fact that Spartanburg has a number of railroads running through it and is a prosperous farming section with some thriving and prosperous towns, one-third of the entire assessed value of property is represented by cotton factories.

**Shipping Cotton by Barge to Boston.**

A departure in the shipment of cotton which will be watched with considerable interest is to be attempted shortly at Galveston, Texas. The steamship Shawmut and the barge Atlas have been chartered by George H. McFadden & Co., of Philadelphia, Pa., to convey a consignment of cotton from Galveston to Boston. The barge will load about 7000 bales and the steamship will also be filled with cotton. If the shipment proves successful the impression prevails in shipping and insurance circles at Galveston that it will revolutionize the transportation of cotton from the gulf to Northern ports. At present this is done almost wholly by steamship lines. Greater economy in haulage expenses could be saved if barge shipments prove practicable and a reduction in freights would follow. The New England millmen would be greatly benefited by low costs of transportation. The ocean-towage trade has assumed large proportions between coal ports on the Atlantic, and in view of their success in this line, it is argued that barges could give equally satisfactory service in carrying cotton. The proposed shipment will be the first of its kind, and probably the longest towage attempted between Atlantic-coast ports. Should this experiment turn out all right it is likely that a regular line of barges will be the outcome. For return cargoes the coal trade offers considerable tonnage, and the general pros-

pects for the innovation seem altogether attractive.

**"THE MILLS TO THE COTTON."****New England Views on the Subject.**

"The mills to the cotton" has been one of the hobbies upon which the MANUFACTURERS' RECORD has harped for some years. It was but a few years ago when the MANUFACTURERS' RECORD's statements regarding the advantages of the South for cotton manufacturing and its predictions in regard to the future of this industry met only with ridicule on the part of our New England friends. Neither the press nor the people of that section were willing to admit that the South would be able to compete with New England mills even in the production of coarse goods. They claimed that it would be impossible for the South to build up its textile interests to the extent of proving a serious competitor with New England. This position, however, has been gradually abandoned so far as coarse goods is concerned. It will not be very long before our New England friends will have to admit that the South has just as good advantages for manufacturing the finer grade of goods as it had a few years ago for making the coarser grades. The position of the MANUFACTURERS' RECORD is now being constantly emphasized by the course of events, and some of the New England papers are freely admitting all that we have ever claimed, so far as coarse goods are concerned. The Boston Journal of Commerce, the textile organ of that section, in an editorial in its last issue seeking to impress upon New England mills the importance of giving great attention to the production of the finest grade of goods, says:

"The manufacture of coarse cotton goods, and, in fact, goods made of yarn of medium counts, can be made cheaper in the South than at any point in the North.

"We have for the last few weeks been endeavoring to obtain such facts as we could in regard to this matter, and are fully convinced that white or colored cotton goods, even of medium fineness, can be produced in the South, landed in our Northern markets and sold at a price that will allow a small margin to the manufacturer, and this price is so low that our Northern mills could hardly trade a new dollar for an old one in manufacturing these goods.

"There is but one conclusion to arrive at, which is that the South has such advantages for the manufacture of coarse cotton goods, either in the gray or colored, that it is no object for the North to undertake to compete with it. The low price of labor, the long hours that the mills can be run, low taxes and a slight saving made in buying cotton are impediments that Northern mills find hard to overcome.

"There is but one course, so far as we can see, for cotton mills in the North to pursue, and that is, to get ready to make finer goods."

Such statements as these fully bear out all the claims that have been made in behalf of the South's advantages for manufacturing the coarser goods. Pushing the development of this branch as rapidly as it is now doing, the South will soon turn its attention to the higher grades with equal success.

**Still Another Mill for South Carolina.**

Another announcement has been made of a new cotton mill for South Carolina. A dispatch states that the "directors of the Clifton Manufacturing Co., of Clifton, S. C., already operating two mills, have determined to erect a new plant, and will build on Thompson's shoals, which has a water-power capacity of 20,000 spindles and 800 looms. Work on the proposed plant is to be commenced as soon as arrangements are completed, and pushed to



an early completion. By next October it is expected the factory will be in operation. Referring to this report Mr. A. H. Twichell, treasurer of the company, writes to the MANUFACTURERS' RECORD: "We have decided to build mill No. 3 to contain 16,000 to 18,000 spindles and 500 to 600 looms; farther than this we have done nothing."

#### A \$500,000 Cotton Mill for Alabama.

The Dwight Manufacturing Co., of Chicopee Falls, Mass., was mentioned in the MANUFACTURERS' RECORD some months ago as intending to build a large cotton mill in the South. This company has now voted to build a \$500,000 mill in the South, and states in a telegram to the MANUFACTURERS' RECORD that the mill will have 25,000 spindles and be located at Alabama City, within a few miles of Gadsden, Ala. While the company has secured from the Massachusetts legislature the privilege of increasing its stock from \$1,200,000 to \$1,800,000, it is stated that this increase will not be made at present, but that the mill will be built out of the surplus of the company. This new mill is intended to manufacture coarse cotton goods for export, and it will, it is reported, have about 25,000 spindles at the start. The movement of cotton-mill concerns from New England to the South is now getting well started, and soon a heavy flow of New England money into Southern mills will be seen.

#### St. Louis Wants the Biggest and Best Cotton Mill.

It was recently reported in the MANUFACTURERS' RECORD that Mr. Jerome Hill, of St. Louis, was interested in the organization of a company to build a \$2,000,000 cotton mill. In an interview with the MANUFACTURERS' RECORD, Mr. Hill states that the people of St. Louis are impressed with the opportunity of building a mill at that city. The inducements, he says, that are now offered for building cotton factories South are such that no man in this generation will ever see again. A mill can be built at the present day at a very much lower cost than ever before, and equipped with the most improved modern machinery, putting it immediately in the front rank as a producer of cotton goods on the lowest basis of cost. The people of St. Louis have determined to have a mill, provided they can secure the best and biggest one in the country. They want one, the very perfection and magnitude of which will in itself attract attention and command trade. This mill must be perfect in construction, equipped with the most modern machinery, so that its output will at once meet with a ready sale in all the great territory of the Southwest, in which St. Louis is the largest distributing point. The advantages of St. Louis are the great saving in transportation, enabling cotton to be laid down at that point at the lowest freight rates, and the immediate distribution of the goods throughout the Mississippi valley. Mr. Hill says that what the St. Louis people now want in connection with this mill is to find an experienced and successful manufacturer in the East or in England to come and join in this great undertaking. They want no experiments, no people who are looking for a job; but want to find some one who, recognizing the advantages of St. Louis, is willing to furnish a part of the capital. St. Louis, he says, stands ready to promptly raise \$1,000,000 for a \$2,000,000 mill. Mr. Hill is one of the foremost cotton factors in the United States, and has for many years been closely identified with the cotton interests of the South.

#### Textile Notes.

THE Knoxville (Tenn.) Knitting Mills contemplates putting in more machines.

A MOVEMENT is said to be on foot at

Opelika, Ala., for the erection of a cotton mill.

THE Newberry (S. C.) Cotton Mills will start the new machinery in its new addition about next February or March.

THE property of the Red Bank Mills, at Irene, S. C., was destroyed by fire last week, causing a loss of \$40,000.

O. H. FOSTER has sold his half-interest in the Pilot Cotton Mills, of Raleigh, N. C., to his partners, J. N. and W. H. Williamson.

BUSINESS with the Nims Manufacturing Co., of Mount Holly, N. C., is so good that the plant is to run night and day to fill orders.

THE Anderson (S. C.) Cotton Mills will be operated by electricity as soon as the new power plant near Anderson is completed.

THE Graniteville (S. C.) Manufacturing Co. will put in its cotton mill \$40,000 worth of new machinery which has already been bought.

THE directors of the Modena Cotton Mills, Gastonia, N. C., met last week and determined to increase the capacity of their plant 2500 spindles.

THE Hartwell Cotton Mills, of Hartwell, Ga., is running day and night, and selling entire output, and is from five to six months behind with orders at fair prices.

THE Commercial Club of Dallas, Texas, still has in hand the proposition for a cotton mill, and has sent a representative to examine the machinery that is to be used.

A \$200,000 mill for the manufacture of cotton yarn will doubtless be built at Atlanta, Ga., as Mr. W. J. Willingham, of that city, is now asking for estimates on the cost of such a plant.

THE Gaffney Manufacturing Co., Gaffney, S. C., is making marked progress with its new 25,000-spindle mill. This mill will have a complete introduction of the Aerophor system of air-moistening.

THE machinery for the extensive addition to the Riverside Cotton Mills, at Danville, Va., is being received and put in place. It has not yet been definitely stated when this additional machinery will be put to work.

THE Tuckapau Mills, Wellford, S. C., is nearing completion, and will soon be ready for the erection of machinery. This mill will be equipped with all modern machinery and appliances, including the Aerophor system of air-moistening.

THE Pelzer Manufacturing Co., of Pelzer, S. C., is about to introduce the Aerophor system of air-moistening in its weaving mill, an order for this system having been placed with the United States Aerophor Air-Moistening Co., of Providence, R. I.

THE subscriptions to the third new cotton-mill company at Greenville, S. C., have reached over \$50,000, and the success of the plan is about assured. A capital of \$100,000 is proposed, and Capt. O. P. Mills is mentioned for president of the company. Payments are to be made on the instalment system.

THE Courtenay Manufacturing Co., of Newry, S. C., has its mill equipped throughout with the latest pattern of machinery and appliances, including the Aerophor system of air-moistening, which is now being extended to its spinning department. This system was originally adopted for its weaving department, and has proved a most profitable investment.

THE G. W. Patterson Manufacturing Co., of Concord, N. C., which was organized last April, has completed the dam for its proposed mill. A number of tenement-houses and the mill building have also been completed, and work is constantly being done on the plant. The company has a subscribed capital of \$25,000, and the officers are G. W. Patterson, secretary-treasurer, and W. R. Kindly, president.

## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

#### Cottonseed for Hogs.

Still another use for cottonseed has been discovered. It is being successfully fed to hogs in connection with other food. The animals eat the seed, hulls and all, and it is stated by South Carolina farmers that it does not injure the quality of the flesh or fat. Here is a way of disposing of the seed when the price of cotton oil is forced below a profitable sale. Turn it into meat.

#### The Markets for Cottonseed Products.

NEW YORK, December 11.

As predicted in previous report, a considerable volume of cotton oil has found its way to the soap kettles. Free arrivals and slow demand are current features of the trade. With regard to values, crude oil has approximated the low-water mark recorded earlier in the season. The outlook is of a decidedly unpromising character. In view of the fact that sound seed may be purchased on a lower basis than that which marked the consumption of the several crops of the immediately preceding seasons, a salient stimulus is brought to bear on the seed-crushers pointing to continued operations as long as their financial conditions and accommodation for accumulated stocks of oil and cake will permit. The abnormally low seed values may result in diverting the product into other channels. Within these peculiar limitations the crushers are evidently securing the advantages current conditions present. The demand for seed is, however, slow, owing to weak oil and cake markets, conditions which foster stock accumulations and necessarily reduce seed values. The threatened prohibitory measures with regard to duties on American products entering Germany, and of which cottonseed oil is not the least important, is a matter of serious consequence to the trade. The imposition of a tariff rate 250 per cent. in excess of the present duty, as proposed in the German Parliament, will effectually shut out American oil. Probably 1,000,000 gallons of prime summer white and butter oils are annually exported to Germany for the manufacture of compound lard and margarine, respectively. The comparatively high duty imposed on compound lard prohibits its introduction into Germany, while favoring the importation of the ingredients which compose it, of which cottonseed oil is the most important factor. Protection to German industries is the object aimed at ostensibly, but the action taken by the United States government with regard to a commodity with which Germany is prominently identified has unquestionably a direct bearing upon the situation. The market closes today as follows: Crude, 24 to 24½ cents; f. o. b. mills, 19 to 21 cents; off grade, 22 to 24 cents; prime summer yellow, 29 cents; off summer yellow, 28 cents; winter yellow, prime, 36 to 38 cents; yellow butter grades, 30 to 31 cents; winter white, prime, 37 to 39 cents; soap stock, 1½ cents per pound. Sales of 1500 barrels of prime summer yellow are reported from New Orleans at 30 cents, with 29 cents asked for January delivery.

Cake.—The conditions which govern this market are unchanged, while the prospect for betterment seems doubtful. Offerings as low as \$16.75 per ton have been declined, and it is difficult for the crushers to realize on their holdings at even less figures than those quoted. It is regrettable that the policy adopted by a number of the smaller mill-owners in conjunction with the planters in their immediate neighborhood becomes impracticable on a large scale, though with adequate transportation

facilities it might be materially enlarged. A compact between the crusher and planter is made, the former receiving the seed, crushing and extracting the oil therefrom and returning the residue to the planter in pulverized form for fertilizing purposes, no monetary consideration entering into the transaction. By this means the crusher increases his oil stock without being encumbered by the cake stock, and the planter, in lieu of his seed, receives an excellent fertilizer in convenient form. New Orleans prices per ton, \$17.00 to \$17.50.

#### Cottonseed-Oil Notes.

THE cottonseed-oil mill in Gadsden, Ala., owned by Myrick & Son has resumed operations after being shut down during the year, and will run on full time in the future.

A SPECIAL from Washington, D. C., says the Department of State has been notified of a proposed change in the German customs tariff, by which the duty on cottonseed oil will be increased 250 per cent. over the present rates. The present duty on American cottonseed oil is four marks, and it is to be raised to ten marks. If, however, the imported cottonseed oil is to be used for soap, it may be officially drugged until unfit for food, when it is to be admitted at the rate of eighty-five cents. The raising of the duty is supported by the report that its use for food purposes rose from 142,000 pounds in 1885 to over 600,000 pounds in 1893.

THE market for cottonseed products in New Orleans continues steady, with prices unchanged. The following quotations are receivers' figures: Cottonseed, \$8.00 per ton of 2000 pounds delivered; cottonseed meal is jobbing at depot at \$17.00 per ton of 2000 pounds for export, and \$17.00 to \$17.50 per long ton f. o. b.; oilcake, \$17.00 to \$17.50 per long ton f. o. b.; crude cottonseed oil at wholesale, 23 to 24 cents per gallon for strictly prime crude in barrels, and 20½ to 21 cents for loose; refined cottonseed oil, 26½ to 27 cents; cottonseed hulls, 20 to 25 cents per 100 pounds; linters—A, 2½ to 2¾ cents; B, 2 to 2¼ cents, and C, 1½ to 1¾ cents.

#### Tennessee Oil Development.

Reports from the oilfields located in the Cumberland mountain region of Tennessee are to the effect that several large corporations are preparing to operate there on an extensive scale. It is reported that the Cumberland Oil & Gas Co. has secured 8000 acres of lands in Putnam and Overton counties and will sink several wells. The company is from Huntington, W. Va. Bruno Gerndt, of Allardt, Tenn., it is stated, has leased 60,000 acres in Fentress and Pickett counties, and has enlisted Buffalo capitalists in his venture. J. B. Compton represents the Interstate Petroleum Co., in which Providence (R. I.) people are interested. John H. Onstatt, of the Cumberland Mountain Coal Co., is another interested party.

#### Location For Flour Mill Wanted.

J. A. Tubbs, of Pulaski, Ky., wants a location for a roller-flouring mill of forty to fifty barrels per day capacity; water-power is preferred.

THE Messrs. Lippard, of Concord, N. C., are endeavoring to organize a company to erect a cotton mill. Considerable stock has already been subscribed for, and the remainder necessary will doubtless be taken. Work on the plant will be commenced as soon as possible.

THE Trion Manufacturing Co., of Trion Factory, Ga., has completed a new warehouse for its cotton supply, and added a new steam engine, which makes four engines in all. The company is now able to run the whole mill by steam-power, without any stop for low or high water.



## PHOSPHATES.

### EUROPEAN PHOSPHATES.

#### The Norwegian Deposits.

[FOR MANUFACTURERS' RECORD.]

Norwegian phosphate (apatite) is found in the crystalline rocks of the Laurentian system. The deposits occur on the south-east coast, between Arendel and Christiana, and the phosphate is found in regular veins, with a nearly perpendicular dip. At times the whole of the vein matter is pure apatite, but this is most exceptional, and usually other minerals, such as mica, hornblende, calcite and rutile are associated with the phosphate. In form the phosphate is crystalline and very similar to the Canadian description. It varies in color from an almost pure white to yellow, green and red. It is the richest of all known phosphates, and analyses of picked samples run over 92 per cent. Actual shipments have tested as much as 88 per cent., with less than 1 per cent. of oxide of iron and alumina.

The earliest workings were commenced in 1854 in the neighborhood of Krageroe, and for several years an average of nearly 3000 tons per annum were extracted. Further discoveries were made at Oedegarden in 1874, and the output was increased to nearly 4000 tons per annum for about five years, after which time the workings were more productive. The most extensive developments were conducted at Bamble, where an exceptionally rich deposit was discovered. But the annual shipments from Norway never exceeded 11,119 tons, which figure was reached in 1890. Since then the industry has become almost inoperative, and during the last two years a few hundred tons only have been raised.

Owing to the hardness of the surrounding rocks and the small proportion of phosphate to the total tonnage extracted, the cost of production has always stood at a high figure. With the exception of the Bamble workings, mining has only been carried on in a desultory manner without proper equipment, and pits have been abandoned when too deep for ordinary operations. It is probable that with sufficient capital to purchase proper mining plant and appliances, the output might have been considerably larger and operations more profitable. Just prior to the discovery of the Florida deposits, when prices stood at a high level, considerable attention was paid to these deposits, and prospecting was being actively carried on. The appearance of the new field in Florida and the great drop in prices quickly put an end to the chance of further development in Norway, and any interest then aroused has now completely disappeared.

#### German Phosphates.

Phosphate was first discovered in Germany in 1864, near the village of Staffell, about two miles from Limburg, on the Lahn, in the province of Hassen. The analyses of the first samples showing between 66 and 68 per cent. of phosphate, which proved the discovery to be of great value, prospecting was actively carried on, and further deposits were brought to light in various parts of the province. The most important workings are situated in the region of the Lahn valley, between Wetzlar and Diez, where operations have been continued up to the present day.

The phosphate deposits are found in the hollows of the limestone rock of Devonian age, which underlies this part of the country. The deposits, which are pockety in nature and variable in extent, follow the undulations of the limestone, and where the cavities are largest and deepest, there the phosphate is found in greatest abundance. The depth of these pockets rarely exceeds twelve feet; more usually the layer or bed in which the phosphate occurs averages from two to four feet. Mining is carried

on by means of shafts, which are sunk through the superincumbent earth and clay down to the limestone rock. The course of the deposit is then stoped out in whatever direction it runs, the roof being supported by timbers. Owing to the irregularity of the stratum or bed and the consequent difficulty of moving the phosphate under ground, frequent shafts are necessitated, and it is not unusual to find three or four shafts to each acre exploited.

The product, after being raised to the surface, has to undergo a washing process, so as to separate the phosphate rock (which averages from 25 to 33 per cent. of the mass extracted) from the clay and other concomitant impurities. As the rock leaves the washer it is separated automatically into various sizes and qualities.

In form the phosphate, which is compact, is conglomerated stalactite, shaly and kidney-shaped. Its usual color is a yellowish-brown, though other colors, notably red, are frequently to be observed. Its hardness and specific gravity are variable. Although individual specimens run as high as 75 per cent. phosphate, with about 5 per cent. of iron and alumina, yet whole shipments have rarely yielded over 64 per cent. In the early days of the industry many thousands of tons were shipped to England, but, owing to the high percentage of iron and alumina found in these Lahn phosphates, the demand soon fell away, and the outlet became restricted to Germany. Of late years almost the entire production has been consumed by two large manufacturers, who work their own deposits and employ the material for the manufacture of concentrated superphosphate, for which process the presence of a high percentage of iron and alumina offers no difficulty. The average test of recent material is from 40 to 50 per cent. phosphate, of which nearly half is in the form of oxide of iron. The Liege deposits of low-testing phosphates have recently still further curtailed the Lahn output, which fell from 41,000 tons in 1889 to 15,000 tons in 1892. The largest output was made in 1884, when 53,000 tons were produced. Since 1867 some 730,000, or an annual average of nearly 30,000 tons, have been produced.

In addition to these Lahn phosphates, Germany contains some other deposits in the neighborhood of the Harz mountains in the form of coprolites testing from 40 to 55 per cent., but these are of local importance only, and the industry has never exceeded a few thousand tons per annum, which have been manufactured in local works.

C. C. HOYER MILLAR.

#### South Carolinians Investing in Florida Phosphates.

A syndicate of Charleston phosphate miners has just made one of the most important purchases of Florida phosphate land that has been recorded for some time past. The gentlemen comprising the syndicate are Capt. C. C. Pinkney, Major E. Willis, Messrs. F. C. Fishburne and Ben Haywood, who have just purchased a large property in Citrus county, and located in the very best hard-rock section of Florida. Capt. C. C. Pinkney is well known as one of the largest miners in South Carolina next to the Coosaw Company, and operates, so the MANUFACTURERS' RECORD is informed, the Magnolia mines, Gregg mines, Horseshoe mines, Farmers' Mining Company and the Wofford mines.

#### Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, December 13.

The market for phosphate rock at the moment is very dull, and but little moving in a local way. Manufacturers consider the outlook such as to warrant small purchases, and until after the new year are not disposed to increase their stocks. The market in South Carolina is quiet, and the only activity is among local buyers. The

foreign demand is lighter than usual at this period of the season. In Florida the output has not been as great for the past month, but miners are pushing the work of development with the same vigor as formerly. A better demand from the foreign market is expected, and there is also a good domestic business in sight. The market continues very steady as to values, which are quoted as follows: South Carolina rock, \$3.25 to \$4.00 for crude, \$4.50 for hot-air-dried and \$6.50 to \$7.00 for ground rock, all f. o. b. Charleston. Florida rock is quoted \$4.50 to \$4.75 for river pebble, and \$4.75 to \$5.00 for land pebble, all f. o. b. Tampa or Punta Gorda. The only charter reported during the week in the New York market was a schooner from Cartaret, N. J., to Pawtucket with phosphate at \$1.20.

#### FERTILIZER INGREDIENTS.

The market for ammoniates is quiet, but with enough inquiry to absorb current offerings on the basis of lower quotations. Sulphate of ammonia (bone), blood and tankage are in moderate request at the decline in prices. Fish scrap is dull and prices nominally easy. Nitrate of soda is somewhat easier under more liberal offerings.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	3 35@	\$3 40
Sulphate of ammonia, bone.....	3 20@	—
Nitrate of soda.....	2 15@	2 20
Hoof meal.....	2 00@	2 05
Blood.....	2 15@	2 20
Azotine (beef).....	2 25@	—
Azotine (pork).....	2 25@	—
Tankage (concentrated).....	1 90@	1 95
Tankage (9 and 20).....	1 85	and 10
Tankage (7 and 30).....	18 00@	19 00
Fish (dry).....	22 0-@	23 00
Fish (acid).....	15 00@	15 50

CHARLESTON, S. C., December 9.

The phosphate market continues rather inactive, sales being reported as scattered and few, and offerings being at figures too low to meet the acceptance of producers. The movement of rock, foreign, coastwise and local, is very good. The river companies are shipping heavily to foreign markets, while the land miners are active filling old contracts for coastwise trade. The manufacture of fertilizers continues, and the outlook brightens as the season advances. The sale of ammoniates is reported as limited and that market dull. Prices of phosphate are about \$3.75 for crude, \$4.25 for hot-air-dried and \$7.00 for ground rock, all f. o. b. Charleston. The coastwise shipments for the week were: David Baird, 900 tons for Baltimore; E. C. Middleton, 800 tons for Baltimore; Warwick, 850 tons for New York; S. B. Marts, 650 tons for Baltimore. In port and loading are the Ralph M. Haywood, E. G. Hight, Josephine, Florence Randall, G. R. Congdon, M. J. Lawrence, J. C. Sweeney and Fannie Reiche. The shipments by water since September 1 were 23,827 tons crude and 715 tons ground rock, against 28,843 tons crude and 300 tons ground rock for same date last year.

#### Phosphate and Fertilizer Notes.

THE annual meeting of the stockholders of the Navassa Guano Co. will be held in Wilmington, N. C., on Thursday, the 18th inst.

MR. A. TRUBENBACH, of the Anglo-Continental (late Ohlendorff's) Guano Works, reports a shipment of 1000 tons phosphate now going forward for December-January loading at Savannah.

MESSRS. J. M. LANG & CO., of Savannah, Ga., report the shipments of phosphate rock from that port for the month of November as follows: 1st, steamship Roxby, 700 tons, and on the 2d, steamship Haworth, 300 tons, both for Bremen; 8th, steamship Massasoit for Liverpool with 1180 tons; 13th, steamship Castlegarth for Bremen with 1665 tons, and on the 23d, steamship Haxby for Liverpool with 1508 tons.

THE shipments of phosphate rock for the week ending December 7 from the port of

Charleston, S. C., were as follows: Schooners S. B. Marts with 780 tons and Emma C. Middleton with 670 tons, both for Baltimore; Oscar C. Schmidt for Alexandria with 775 tons, and Annie C. Grace for Norfolk with 770 tons. The total shipments coastwise since September 1 amount to 23,827 tons, against 28,849 tons for the corresponding period in 1893.

COL. GEORGE W. SCOTT, of Atlanta, Ga., and others interested in the organization of the Peace river mining companies were in Bartow, Fla., last week in consultation with Wilson & Wilson, attorneys, who have been employed to examine the titles to the 24,000 acres of land involved in the transaction. The companies which have so far gone into the pool are the Peace River, the Charlotte Harbor, the Gulf, Acadia and De Soto Mining Co. It is expected that the organization will be perfected about the first of the new year.

THE following shipments of phosphate are reported through the port of Brunswick, Ga., for the month of November by the Brunswick Terminal Co.: Steamship Loch Elire, on the 19th, for Harburg with 1993 tons; steamship Teelin Head, on the 22d, for Garston with 859 tons, and the steamship Sir William Armstrong, on the 29th, for Harburg with 1523 tons; total 4375 tons, with shipments previously reported for ten months of 1894 amounting to 63,479 tons, giving a grand total of shipments to November 30 of 67,854 tons.

THE shipments of phosphate from Port Tampa during November were not as large as usual. The clearances for the month were as follows: Schooner Joseph W. Foster, loaded by the Foote Commercial Phosphate Co., for City Point, Va., with 926 tons of pebble; schooner Addie Bailey, loaded by the Bone Valley Phosphate Co., for Baltimore with 833 tons, and the barkentine Thomas Brooks, loaded by the Bone Valley Phosphate Co., for Mantua creek with 521 tons; total 2281 tons. Vessels now loading are schooners Major Pickands and Benjamin C. Frith and the bark Swansea Castle.

#### A New Ice-Making Process.

A new process of making ice, for which some remarkable claims are made, was presented to public notice in Baltimore last week and inspected by a large number of business men. The inventor of the new method is O. Hammond, Jr., of the Maryland Ice Co. Economy in manufacture is the chief claim for the new process, and it is stated that by its adoption a saving of fully 50 per cent. is made in producing artificial ice. The ice is made in cans, and sample blocks were shown weighing from 400 to 1000 pounds. These blocks were as clear as crystal, and printed matter could be read through them without difficulty. The patents for the process are controlled by Reuter & Mallory, of Baltimore. It is their intention to organize a company to control the process, after which subsidiary companies will be licensed to manufacture ice in the United States and foreign countries.

#### The Port Royal Dry Dock.

The new dry dock at Port Royal, S. C., cost \$400,000. This dock is one of the largest in the United States. It will be able to accommodate the large battle-ships, and, it is said, will be the only one on the coast that can do so. The channel leading to it will accommodate a vessel of twenty-six feet draught.

#### Potato Starch Factories.

The Bailey-Lebby Co., of Charleston, S. C., advises the MANUFACTURERS' RECORD that it is collecting information regarding the manufacture of potato starch in South Carolina, the chances for its success, etc., and will be glad to hear from anyone who is posted on the subject.



## MECHANICAL.

## Garden Gates.

A handsome yard-gate is a point of exterior beauty worthy of consideration. The usual yard-gate seems to be a continual source of annoyance without any compensating benefits of beauty. The small boy swings on it and throws it out of plumb, and the mischievous lads take it off its hinges. The inquisitive cow prys it open and destroys one's pet flowers. Then the effect of weather adds to these difficulties by



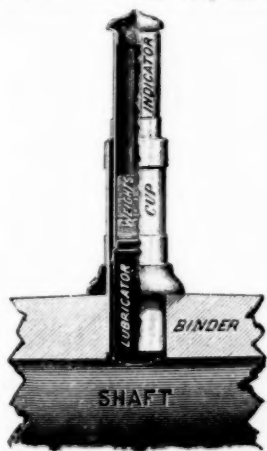
STEEL GARDEN GATE.

swelling and shrinking the timbers. To overcome all these disadvantages a gate has been designed and is manufactured by H. O. Nelson, of Knoxville, Tenn. The illustration gives a view of this gate. It is made of steel, possessing the greatest durability and answering all requirements. It presents an attractive appearance and gives an ornamental effect. These gates are unaffected by weather, are positive in action, require no repairs and are sold at a low figure.

## New Journal Lubricator.

A cut is presented herewith of an improved lubricator, designed and manufactured by W. J. Faul, 120 Liberty street, New York city. The illustration shows a half-sectional view of this device.

The cup consists of two brass tubes. One, the outer tube, fits in the cap or binder, while the other one, the indicator or follower, being in the shape of a piston, fits inside the first and rests on the candle-shaped lubricator, thereby keeping the same in constant contact with the shaft. In this inner tube can be placed one or



NEW JOURNAL LUBRICATOR.

more weights to suit the speed of the shaft. The indicator will show at a glance when the lubricator is consumed and requires renewal. The cup has also a movable shoulder whereby it can be readily adjusted to suit any thickness of binder. This lubricator is claimed to be automatic and positive for lubricating journals, and feeds only while the shaft is in motion, and then only in proportion to its speed. There is said to be absolutely no drip where these lubricators are used, which is a feature recommending them. Frequently large losses of goods are caused by oil drippings,

and floors and ceilings become saturated with waste oil. With this device all such dangers are, it is stated, entirely obviated. They will, it is said, reduce friction to a minimum, and, as the lubricator is always in contact with the shaft, no frictional heat is required to secure lubrication. The high viscosity of these goods will, it is claimed, reduce the wear on journals 50 per cent., and they are, the manufacturer states, cheaper and superior to either oil or grease.

## Improved Arc Lamps.

An electric arc lamp of marked efficiency is illustrated herewith. It possesses several features original with this lamp which largely increases its power. The lamp is manufactured by the Helios Electric Co., of Philadelphia, Pa., and the phenomenal success attending its introduction evidences its highly-improved character. This company is the licensee of the Helios Electric Co., of Germany. It is a pioneer in the manufacture of alternating arc lamps to be operated from incandescent circuits. The company has been in existence about three years, and during that time the special merits of this lamp have given it extensive patronage. This lamp is the result of careful experiments in adjusting the foreign type to domestic circuits. The old lamp has been reconstructed upon new lines and possesses a feature that will commend itself to all interested in electric lighting with arc

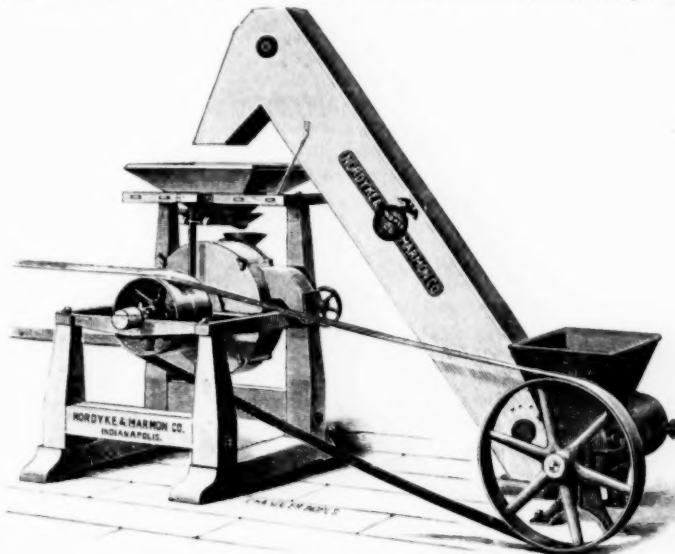


IMPROVED ARC LAMP.

lamps. It is calculated that a considerable percentage of light is lost because of the want of proper distribution. This lamp has a reflector plate, by means of which the lighting area of the lamp is said to be increased 50 per cent. This company also has what is believed to be another great advancement in electric lamps. It is a new direct-current lamp to be used on low-potential circuits. Many new ideas are combined in this lamp. One advantage is the satisfactory service rendered when two lamps are running in series of 110 volts, there being an absence of all unsteadiness, and one lamp does not take current from the other, thus avoiding the uncomfortable see-saw flickering. These improvements were devised by Thomas Spencer, electrician of the company. In point of economy and high-grade service the lamps of this concern claim special distinction. Those interested in electric lighting will find profitable suggestions by inspecting the novel features of this company's product. Any details desired can be had by addressing the company as above.

## French Buhr Mills for Grinding.

All kinds of improvements in machinery or systems do not move on parallel lines, even in what is considered the same branch of business. For instance, when the roller system succeeded buhrs in flour milling it was taken for granted by many that the French buhr mill was no longer good for grinding anything whatever. This impression has been proven to be an erroneous one. The iron grinder, it is claimed, cannot compare with a portable French buhr mill,



VERTICAL FRENCH BUHR MILL AND EAR-CORN GRINDER.

and it is stated that a French buhr mill will last enough longer to more than make up the difference in first cost.

Farmers, stock-raisers and those doing a custom meal and feed-grinding business are coming to appreciate the advantages of mills fitted with genuine French buhr-stone. For the benefit of those who have had no opportunity to make comparisons, it is stated that French buhr mills will grind the finest quantity of table meal, and, it is claimed, the only mill, not excepting rolls, that will do it at one reduction.

It stands to reason that a mill that grinds good bread meal will grind good stock feed. It is claimed that French buhrs will last longer, will grind more with same power, are not so liable to get out of order and are more satisfactory in every way.

We illustrate an outfit which seems to fill the requirements for a mill to be run with an engine of anywhere from five to fifteen horse-power. It consists of a vertical French buhr mill and an ear-corn grinder called the Hoosier crusher, the two connected by elevator and belt as shown. Ear corn is fed into the Hoosier crusher, which reduces it to coarse feed, and is discharged into the elevator, and by it to the buhr mill, which reduces it to the finest feed.

This rig is called by the manufacturers the cob-meal outfit. It is built in two sizes, and the capacity runs up as high as forty bushels an hour. When not grinding ear corn the vertical mill can be used for grinding small grain, either separate or mixed, for stock feed, or, as the mill is fitted with genuine French buhr, can be used for grinding table meal. The mills are furnished separate if not wanted together.

The smaller size of the French buhr mill can be driven by two horse-power, and the Hoosier crusher requires only that to drive it.

The convenience of attaching to power, the simplicity, durability, small liability to get out of order and ability to do fast and fine grinding with small power commends these mills to feeders, farmers and feed-mill men.

These mills are manufactured by the Nordyke & Marmon Co., 85 York street, Indianapolis, Ind., which will send its

Book on Mills" to those interested. This firm is said to be the largest in the world devoted exclusively to building flour mills and buhr-mill machinery.

## New Automatic Regulator.

This illustration shows a late invention in the line of automatic regulators from a well-known factory which was established over one-quarter of a century ago. It completes a full line of these automatic valves, designed to be used for every conceivable



NEW AUTOMATIC REGULATOR.

piston-cylinders and stuffing-boxes are dispensed with. In constructing this governor the aim has been to divest it of everything likely to render its operation uncertain, even if long idle or neglected, as when used on fire-pumps. For simplicity, durability and effectiveness it is claimed that it is unexcelled. This device is known as the Locke direct-acting pump, governor and reducing valve, and is made by the Locke Regulator Co., Salem, Mass.



## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on pages 306 and 307.]

## Lumber Directory.

Readers of the MANUFACTURERS' RECORD who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

## Millions in Southern Lumber.

A dispatch from New Orleans states that a party of fifteen Northern lumbermen are prospecting in Louisiana and Mississippi with the view of investing several million dollars along the line of the Illinois Central Railway in timber lands. The leading man of the party is Frederick Weyerhaeuser, of St. Paul, an extensive lumber dealer.

## LUMBER MARKET REVIEWS.

## Baltimore.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, December 13.

In the local lumber market the business of the week has been restricted by the extreme inclemency of the weather. The receipts of lumber have been very light, all vessels in the bay having been detained by stormy weather. The stocks of yellow pine are, however, sufficient for the light demand. Yardmen are not buying freely, but are taking such quantities of material as will serve their present purposes. Air-dried yellow pine is still very low as to value, and there are no indications of any advance in the near future. White pine is moving more freely, while prices are very steady at quotations. The movement in hardwoods is fairly active, and in the export trade there is a better volume of business reported. The demand from local dealers is moderate, and confined to small purchases. Prices are generally steady throughout the list. Planing mills report business as quiet, but expect a better trade after the holidays.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE.		
5-4x10 No. 2, kiln dried.....	\$15 00@	17 00
5-4x12 No. 2, " " " " " " " "	\$17 00@	18 00
4-4x10 No. 1, " " " " " " " "	\$16 00@	17 00
4-4x12 No. 1, " " " " " " " "	\$17 00@	18 00
4-4 narrow edge, No. 1, kiln dried.....	\$13 50@	14 50
4-4 wide edge, " " " " " " " "	\$18 50@	19 50
6-4x10 and 12, " " " " " " " "	\$23 50@	24 50
4-4 No. 1 edge flooring, air dried.....	\$13 50@	14 00
4-4 No. 2 edge flooring, " " " " " "	\$10 50@	11 50
4-4 No. 1 12-inch stock, " " " " " "	\$14 50@	15 50
4-4 No. 2 " " " " " " " "	\$12 50@	13 50
4-4 edge box or rough wide " " " " " "	\$9 00@	10 00
4-4 " " " " " " " " (ordin'y widths)	\$8 00@	8 50
4-4 " " " " " " " " (narrow).....	\$7 50@	8 00
4-4 12-inch " " " " " " " "	\$10 00@	10 50
3/4 narrow edge.....	\$6 00@	6 50
3/4 wide.....	\$6 50@	7 50
Small joists, 2 1/2"-12, 14 and 16 long.	\$7 50@	9 50
Large joists, 3"-16 long and up.....	\$9 00@	9 50
Scantling, 2x3-16 and up.....	\$8 00@	9 00
WHITE PINE.		
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4	\$48 50@	50 00
3d clear, 4-4, 5-4, 6-4 and 8-4.....	\$43 00@	44 00
Good edge culls.....	\$14 50@	15 50
Good stock.....	\$16 50@	17 50
CYPRESS.		
4-4x6, No. 1.....	\$20 00@	21 00
4-4x6, No. 2.....	\$15 00@	16 00
4-4x6, 16 feet, fencing.....	\$11 50@	12 50
4-4x6, rough.....	\$9 50@	10 00
4-4 rough edge.....	\$9 00@	9 50
4-4 edge, No. 1.....	\$18 50@	19 50
4-4 " No. 2.....	\$12 00@	13 00
Gulf, 4-4, Nos. 1 and 2.....	\$29 00@	31 00
Gulf, 6-4, Nos. 1 and 2.....	\$31 50@	32 50
HARDWOODS.		
Walnut.		
5-8, Nos. 1 and 2.....	\$65 00@	75 00
4-4, Nos. 1 and 2.....	\$80 00@	90 00
5-4, 6-4 and 8-4.....	\$85 00@	95 00
Newell stuff, clear of heart.....	\$85 00@	100 00
Culls.....	\$20 00@	30 00
Oak.		
Cabinet, white and red, Southern, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	\$29 00@	33 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	\$53 00@	55 50
Culls.....	\$10 00@	15 00
Poplar.		
Nos. 1 and 2, 5-8.....	\$24 00@	25 00
" " 4-4.....	\$26 00@	30 00
Nos. 1 and 2, 6 and 8-4.....	\$32 50@	33 50
Culls.....	\$14 50@	15 50
SHINGLES.		
Cypress, No. 1 hearts, sawed, 6x20.	\$7 25@	7 50
No. 1 saps, sawed, 6x20.....	\$5 50@	6 00
No. 1 hearts, shaved, 6x20.....	\$6 50@	7 00
No. 1 saps, shaved, 6x20.....	\$5 00@	5 50
LATHS.		
White pine.....	\$2 60@	2 65
Spruce.....	\$2 15@	2 20
Cypress.....	\$2 15@	2 20

## Norfolk.

[From our own Correspondent.]  
NORFOLK, VA., December 10.

The market during the past week has shown a moderate volume of trade, and the lumber industry of the port shows a steady improvement. The general features of the lumber situation are similar to those last reported, and the outlook for a general revival in the early spring is most encouraging. There is a general disposition among millmen and manufacturers to carry lighter stocks, as the demand is yet somewhat limited to the immediate wants of retailers and others. The mills at this point and at adjacent localities in the State are now in fair shape for operations, and a number of new milling plants are building. The mills in the interior report logs as somewhat scarce, but under the circumstances they are all running nearly full time. The logging roads are doing a large business in hauling logs for the various lumber mills in this vicinity and for shipment. As to receipts of lumber at this port during the present month, they have been quite liberal, and by railroad especially heavy during the week. Stocks are generally well assorted, and the demand is mostly for box grades, edge and 10-inch stock. There is a fair supply of lumber, and perhaps ample for present requirements, but should a brisk demand set in the assortment would not last long in its present condition. There is a good report from planing mills, and most of them are well supplied with orders; in fact, some of them are running day and night to fill contracts. There is a good demand for boxes, and factories are all busily employed. Lumber freights are unchanged, and charters are easy at \$2 20 to \$2 40 for New York and sound ports, Baltimore \$1.00 to \$1.20 and Washington \$1.25 to \$1 50.

## Charleston.

[From our own Correspondent.]  
CHARLESTON, S. C., December 10.

During the week under review there has been a steady tone prevailing in the local lumber market, and the volume of trade is fair. There is a good demand for certain grades of manufactured lumber, but the scale of values shows a narrow margin of profit. Advances from all milling sections in the interior are more encouraging, as orders are coming in more freely, and mills generally sawing on full time. The trade in cross-ties is improving, and there has been a good demand lately from trunk lines of railroad. The market closes steady at the following quotations: Merchantable, \$14.00 to \$16.00 for city stocks, and \$12.00 to \$14.00 for railroad; square and sound, \$9.00 to \$13.00 for railroad, \$8.00 to \$11.00 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. The shingle market is steady at \$5.00 to \$7.00 per thousand. The shipments of lumber during the week for New York were as follows: Schooners Georgetta Lawrence, 257,500 feet; I. H. Parker, 400,000 feet; Maggie M. Keogh, 504,000 feet, and steamship Croatan, 194,000 feet. The brig Waubus cleared for Washington with 384,000 feet. The total shipments of lumber from the port since September 1 amount to 16,526,467 feet coastwise and 218,523 feet foreign, making a total of 16,744,990 feet, against 9,994,861 feet for the same period last year. Coastwise freights are unchanged at \$4.75 for New York and \$4.25 for Philadelphia. The Gardner & Lacey Lumber Co., of Georgetown, reports a splendid increase in its business in the past month, most of which was for coastwise trade. The Atlanta Lumber Co. has furnished 2,500,000 feet of lumber recently to be used in the construction of the cotton mill at Pelzer, S. C.

## Savannah.

[From our own Correspondent.]  
SAVANNAH, GA., December 10.  
The improvement in the lumber market,

while slow, seems to be more decided in its character, and the demand has been fairly active during the week. Business in the interior is reported better, and at all milling sections there is a good run of orders at the mills. The local demand is mostly for dimension stuff, while the flooring trade is rather dull. Prices are considerably firmer, but yet too low to be profitable. There is no foreign demand of any moment, while the coastwise business is steadily improving. The market closes steady at the following quotations: Ordinary sizes, \$11.50 to \$12.50; difficult sizes, \$13.00 to \$18.00; flooring boards, \$15.00 to \$22.00; shipstuffs, \$16.50 to \$25.00, and sawn ties, \$10.00 to \$10.50. The freight market is quiet and steady at unchanged rates for coastwise business. Foreign freights are more or less nominal. The rates from this and nearby ports in Georgia are quoted at \$4.00 to \$5.00 for a range including Baltimore and Portland, Me. Railroad ties, basis forty-four feet, 14 cents. Timber rates 50 cents to \$1.00 higher than lumber. To the West Indies and Windward rates are nominal; to Rosario, \$12.00 to \$13.00; Buenos Ayres or Montevideo, \$10.00 to \$11.00; to Rio Janeiro, \$14.00; to Spanish and Mediterranean ports, \$11.30 to \$11.50; to United Kingdom for orders, nominal for lumber at £4 5/ per standard. Steamer rates to New York and Philadelphia are quoted \$7.00, to Boston \$8.00 and Baltimore \$5.00. The following clearances of timber are reported during the week: Schooner Melissa A. Willey for Portland, Me., with 361,667 feet; schooner Ida Lawrence for Baltimore with 367,864 feet; New York steamers 48,000 feet of lumber and 276,000 shingles; Boston steamers 33,000 feet of lumber and 4618 staves, and Baltimore 58,600 feet of lumber and 4000 staves.

## Beaumont.

[From our own Correspondent.]  
BEAUMONT, TEXAS, December 10.

A more active market has been the rule throughout the saw-mill section of South-eastern Texas during the past week. The demand for lumber from dealers has been fairly active, and all indications point to further activity during the coming week. There is a good many sawing orders on file, and inquiries are out for some large bills. The export business continues active, and the company now has a number of orders on file. The representative of the Consolidated Export Lumber Co. in South America is now en route for his home in this country. It is stated that he will bring with him the schedules of several cargoes, the sale of which was previously reported. He will also confer with the managers of the Export Company in regard to an extension of its business. It is stated that the prospects of this company are very bright for a large extension of its business in South America and the West Indies. The market at Orange has shown considerable activity during the week, and there has been considerable lumber moved by rail. At Westlake and Lake Charles, La., the movement of lumber has been of considerable volume, and all the mills are running on full time. The annual meeting of Lock, Moore & Co., Limited, was held last week, at which the old officers were re-elected. This company is one of the best managed of any engaged in the manufacture of Southern lumber. The sales for the year show a decrease, however, of 30 per cent. compared with the output of 1893. The average price realized for all grades of lumber sold by them, board measure, was a trifle over \$10.00 per thousand. The directors declared a 10 per cent. cash dividend, and passed something over that amount to the credit of undivided profits.

## Mobile.

[From our own Correspondent.]  
MOBILE, ALA., December 10.  
The movement in both lumber and tim-

ber from this port is at present very light in volume. The timber market shows no decided improvement, and shipments continue of limited quantities, with a slight activity during the week. Advances from Europe are not as encouraging as could be desired, but shippers, however, look for a more active trade after the new year. During the week under review there has been a number of shipments to Great Britain and the Continent amounting to 222,832 cubic feet of sawn timber and 53,162 cubic feet of hewn timber. The total shipments since September are 154,265 cubic feet of hewn timber and 771,981 cubic feet of sawn. Prices continue very steady for hewn timber at 12 to 12 1/2 cents basis per cubic foot, and 12 cents for contract for 100 feet average and classing B1 good. Common and poorly manufactured is not wanted. For hewn oak the demand is limited, with prices nominal. Hewn poplar 11 to 12 cents. Sawn timber is dull at 10 1/2 to 11 cents per cubic foot, basis forty feet average. The demand for lumber is steady and for light shipments. Vessels for Great Britain finish their cargoes with small lots of desirable stuff, and the total business is of small proportions at the moment. The vessels clearing during the week were as follows: Schooners Sea Gull and Union for Grand Caymen with 30,000 feet each; bark Guiseppe Padre for Buenos Ayres with 478,000 feet, and schooner Cora H. Hanson for New York with 306,000 feet. The bark St. Petersburg took out 100,488 feet for Sharpness, England, and bark Alka 83,320 feet for Havre, France, and steamer Sumira 36,725 feet for Progresso, Mexico. Lumber freights are steady, as follows: West Indies, \$7.00 to \$7.50 per thousand; coastwise, \$5.75 to \$6.50; River Platte, \$12.00 to \$14.00, and Mexico, \$7.00 to \$8.00. Timber to the United Kingdom is quoted at 27s. to 29s. per load for hewn, and £4 7s. 6d. to £4 15s. for sawn per standard. Steamer rates for lumber and timber are nominal.

## St. Louis.

[From our own Correspondent.]  
ST. LOUIS, MO., December 10.

The tone of business throughout the various avenues of the lumber industry here is more encouraging to the majority of those interested. Lumbermen and manufacturers are of the opinion that next year will show a large increase in trade. All woodworking establishments throughout the country have been running on short time for more than a year, and stocks at the moment are very low. The hardwood business is at present in very good shape here, and the number of inquiries for next year's delivery are said to be very large. Receipts of lumber are not excessive, and all choice lots are picked up on arrival. Stocks are not heavy, and, with a sudden, quick demand, they would soon become reduced, even with present receipts. Poplar and quartered oak are in good demand, and sales are easily closed at present prices. The better grades of walnut are firm, but common and culls are slow sale. Ash is dull, with very little demand. There is a fair trade in other hardwoods. Yellow-pine dealers are enjoying a good demand, especially for flooring. Builders are buying considerable finishing stock, and there is a good general demand for building material. The local planing mills are doing a fair business, and enjoying a fair margin of profits. Receipts of lumber by rail are about the same as at the corresponding period last year. The car shortage in the South is accountable for the falling off in receipts. There is not as much lumber moving as there was several weeks ago, and both receipts and shipments are light.

## Southern Lumber Notes.

BERTHOLD & JENINGS, of St. Louis, Mo., were the successful bidders on a contract for 500,000 feet of long-leaf yellow pine



for the construction of the Lake Street Elevated Railroad, of Chicago.

THE Alabama City Furniture Factory, at Gadsden, Ala., has started up with a full force of hands, and is turning out a fine grade of furniture.

THE Riverside Lumber Co., of Florence, Ala., has just closed contracts for nearly 3,000,000 feet of logs with parties in Lauderdale county. This company has a fine plant and has a contract for the sale of all its output.

MR. H. A. McEACHERN and Mr. Edward Blount, two well-known turpentine operators, will open a barrel-heading factory at Quitman, Ga., in a short time. It is probable that they will also manufacture syrup barrels.

THE T. F. Tschudy Lumber Co., of Kansas City, Mo., has leased five acres of land at Jonesboro, Ark., to be used as a wholesale lumber-yard. It is stated that the company will probably erect a planing mill on the site in the near future.

DURING the month of November forty-one vessels with cargoes were cleared from Pensacola, Fla., for foreign and domestic ports. The exports were 20,000 cubic feet of hewn timber, 7,672,000 superficial feet of lumber and 2,545,000 feet of sawn timber, with other merchandise.

THE receipts of lumber at the port of New Orleans for the week ending December 7 was 1,216,000 feet, and since September 1 they amount to 25,352,874 feet, against 24,465,619 feet last year. Receipts of shingles since September 1 amount to 3,091,250, against 2,840,250 last year.

THE entire plant of the Bennie Bucket Works at Florence, Ala., was sold on the 7th inst. to J. H. & A. R. Dempster, of Beatrice, Neb. The purchase price has not been made public, but the sale is a bona fide one. The Messrs. Dempster will manufacture tanks, wind-mills and wooden cisterns.

A SPECIAL from Lewisburg, Tenn., states that a representative of the American Cedar Pencil Co. has purchased ground for a pencil factory in that town on a large scale. Cedar land has also been bought, and a resident buyer will receive all the cedar that is offered. Extensive buildings will be erected, which will contain valuable machinery and afford accommodation for the numerous employees.

AT Charleston, W. Va., on the 7th inst. a charter of incorporation was granted to the Middle Mountain Boom & Lumber Co., of Gladys Fork, Tucker county, W. Va., with an authorized capital of \$100,000. The company will construct a boom across Gladys fork and build and operate saw mills, tramroads, etc. The incorporators are William Rosendorf, Daniel Rosendorf and Samuel Rosendorf, of New York, and B. Schelasky and B. Slatz, of Thomas, W. Va.

A DISPATCH from Pearisburg, Giles county, Va., says: "Twelve miles of the railroad in course of construction by the Mountain Lake Lumber Co. have been let to contract, and hands are now grading. The ties are being gotten out and placed along the line. The Mountain Lake Lumber Co. has awarded a large contract for sawing to Mr. G. T. Porterfield and some associates, and they have a large mill in operation in advance of the railroad sawing about 35,000 feet of lumber per day. On this tract of land, owned by the syndicate, there is estimated to be about 200,000,000 feet of marketable timber, besides quantities of ties and tanbark."

THE Old Dominion Iron & Nail Works Co., of Richmond, Va., in a letter to the MANUFACTURERS' RECORD, says: "Matters look a little better South, and if Congress does not tinker with the tariff we see no reason why there should not be a return of confidence. All sections want rest from radical legislation for some years to come."

## Iron Markets.

CINCINNATI, December 8.

In the main the iron market is quiet to a degree that leads to discouragement in some quarters. A surface view of the situation might lead to the conclusion that instead of making improvement, we were going backward. Looking at it more closely, however, a better state of things is shown. It lacks two or three weeks to the time when annual inventories are taken, and very few melters of iron want any more stocks on hand at that time than necessity requires. In addition to this, there is almost universal objection to making engagements and entailing obligations ahead, unless it be to cover contracts actually taken for work. The railroads, which are the missing factor in the market just now, are planning requisitions that will call for a good deal of iron, but the mills and foundries will not see much of this before about February next. The special care of railroad officials is apparently to avoid any increase of obligations before making up their annual statements.

It now looks as if the first real impetus to the market would come from the railroads, which have practically bought nothing in the way of equipment for eighteen months past. Reliable information is at hand showing that most of the leading lines are contemplating more or less liberal purchases of cars after January 1. About 6000 cars are already being counted on by supply men as sure to be placed within six weeks. A few contracts have been let, and bids are now in for perhaps 2000 cars more. Generally speaking, however, orders will be postponed until after January 1. There is pretty good reason to believe that the car shops of the country, which have been idle practically for a year, will then resume work. Each thousand cars calls for 6000 to 8000 tons of iron in its different forms. The effect of placing 10,000 cars early in the new year would be very marked upon rolling mills, malleable-iron works, wheel foundries and axle works.

While the recovery of business is not uniform, and in some lines is entirely wanting, yet in the main the best authorities see a steady improvement. This leads to the belief in the iron trade that next year's consumption must be larger than that now current, and the present consumption, as is now pretty well known, comes very close to taking the product of all furnaces available as producers on the market. The situation, therefore, seems to call for patience and good sense, and to offer a reasonable degree of assurance of better things for the year that is now close at hand.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry.....	\$ 9 75@10 00
South. coke No. 2 foundry, and No. 1 soft.....	9 25@9 50
Hanging Rock coke No. 1.....	12 00@12 50
Hanging Rock charcoal No. 1.....	16 00@17 00
Tennessee charcoal No. 1.....	14 00@14 50
Jackson county stone coal No. 1.....	14 50@15 00
Southern coke, gray forge.....	8 50@8 75
Southern coke, mottled.....	8 25@8 50
Standard Alabama car-wheel.....	15 75@16 75
Tennessee car-wheel.....	15 50@16 00
Lake Superior car-wheel.....	14 00@14 50

PHILADELPHIA, December 8.

The actual business sifted down to orders taken for pig iron and steel has not panned out a heavy tonnage this week, yet nearly every man you meet will tell you his mail is large, and that there is a marked improvement not only in sentiment, but in business, over the conditions existing a year ago. We understand Edison will not be ready to place his concentrates on the market until next April. Nearly \$2,000,000 has been spent so far. If he meets with success, it will be at the expense of Lake Superior and foreign ore miners. The large Johnson plant at Lorain, Ohio, is being pushed to completion, and by the time the frost is out of the ground in the spring the battle of steel kings may commence.

We quote for cash f. o. b. Philadelphia docks:

Standard Alabama No. 1 X.....	\$11 50@12 00
Standard Alabama No. 2 X.....	11 00@11 50

Strong lake ore coke iron No. 1 X.....	13 50@14 00
Strong lake ore coke iron No. 2 X.....	12 50@13 00
Lake Superior charcoal.....	15 00@15 50
Standard Alabama C. C. C. W.....	18 00@18 50

We quote for cash f. o. b. New York:

No. 1 standard Southern.....	\$11 50@12 00
No. 2 standard Southern.....	11 00@11 50
No. 1 standard soft.....	11 00@11 50
No. 1 foundry lake ore coke iron.....	13 50@14 00
No. 2 foundry lake ore coke iron.....	12 50@13 00
Lake Superior C. C.....	15 00@15 50
Southern C. C. C. W.....	18 00@18 50

We quote for cash f. o. b. Chicago:

Southern coke No. 1 soft & No. 2 fdy.....	\$11 50@12 00
Southern coke No. 2 soft & No. 3 fdy.....	11 00@11 50
Ohio Scotch softeners No. 1.....	11 00@11 50
Lake Superior charcoal Nos. 1 to 6.....	15 00@15 50

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$10 75@11 25
Southern coke No. 2.....	10 00@10 25
Southern coke No. 3.....	9 75@10 00
Southern gray forge.....	9 50@9 75
Southern charcoal No. 1.....	14 00@14 50
Missouri charcoal No. 1.....	12 50@13 00
Ohio softeners.....	14 00@14 50
Lake Superior car-wheel.....	15 50@16 00
Southern car-wheel.....	16 75@17 00
Genuine Connellsville coke.....	4 50
West Virginia coke.....	4 50

ROGERS, BROWN & CO.

## TRADE NOTES.

A SECOND order for revolving flat cards has been received by the Pettie Machine Works, Newton Upper Falls, Mass., from the Merchants' Manufacturing Co., of Fall River, Mass.

THE Totten & Hogg Iron & Steel Foundry Co., manufacturers of rolling-mill and tinplate machinery and engines, last week closed a contract with the Baltimore Iron, Steel & Tinplate Co., of Baltimore, for the entire machinery for its new tinplate plant which it is now building at Locust Point, Md.

MESSRS. B. B. & R. KNIGHT, of Providence and New York, after very extensive introduction of the Aerophor system of air-moistening, have placed their eighth order with the United States Aerophor Air-Moistening Co., of Providence, R. I., for the complete equipment of five of their weaving rooms.

A TRIPPLICATE order has been received from Texas by the Triumph Electric Co., of Cincinnati, Ohio. This company has placed orders in foundry for 90,000 pounds of castings for deals on hand and stock. The electric-light and power machinery made by the company is gaining favor in the South, and wherever one piece of its machinery is installed, the excellence and efficiency of the service given results in more orders.

CONTRACT has been closed by Barnard & Hoopes, 916 Arch street, Philadelphia, Pa., with the Salisbury (Md.) Telephone Co. to furnish 100 instruments and switchboard. The line work is almost completed for the exchange, and by January 1 is expected to be in working order. The same firm has received an order from the Edison Electric Illuminating Co., West Chester, Pa., to supply a fifty arc-light dynamo.

THOSE anxious to avoid the severities of Northern winters find a healthful retreat at Newbern, N. C. This place holds out many charms to the winter traveler. Flowers in bloom, salubrious climate, yachting, boating, fishing and hunting are delights of this section. A modern hotel, the Chattawka, gives metropolitan comforts. It has accommodations for 200 guests, and possesses all up-to-date appointments. Maj. DeWitt Clinton Smith, late of the Hotel Clinton, Minneapolis, Minn., is the manager.

RELIABILITY and safety are elements that the public demands shall be present to the fullest extent in elevators. To insure securing such qualities, combined with reasonable cheapness in cost, is good business judgment. The elevators built at the Howard Foundry, Philadelphia, Pa., of which George C. Howard is proprietor, have, by their excellence of design and strength, won much approval. An elevator from this establishment has just been finished at Jacksonville, Ill., and among the work on hand is the completion of one at Freehold, N. J.

AN enterprise that occupies an important relation to the textile interests of the South is the Charlotte Machine Co., of Charlotte, N. C. With the rapid growth of the cotton-mill interests in this section, the inquiry for modern machinery quickly broadened. Nearly three years ago H. S. Chadwick conceived the idea of forming a company to represent many of the Northern builders of cotton and woolen machinery, acting as their agent and furnishing plans and specifications for mills and for developing power. The enterprise under Mr. Chadwick's skillful management prospered, and has met with notable success. With a thorough knowledge of mill engineering, cotton manufacturing and practical acquaintance with modern textile machinery, Mr. Chadwick had made his company an authority on such matters, and built up a large patronage.

A DISCOVERY of earth has been made in Florida whose attributes, it is stated, excel those of fuller's earth, which is imported from England in large quantities. It was found on the tobacco plantations of the Owl Cigar Co., and the material

is said to exist in inexhaustible quantities. A number of analyses and tests have been made, with the most satisfactory results. The J. R. Alsing Co., 60 New street, New York city, which is handling the output from these deposits, has introduced it among some of the principal oil-refiners, who have pronounced it unequalled. It is said to be much lighter in gravity than the imported earth, weighing 15 per cent. less for the same amount in bulk. The success of the new product will be of especial interest to all mineral, animal and vegetable oil refiners and cotton and woolen bleachers, as it offers what is considered a cheaper and better substitute for an article found indispensable in such operations.

BLANK & GOTTSHAUL, Sunbury, Pa., are constructing a fine brick building for the installation of a model 150 barrel roller mill and a 25,000 bushel grain elevator. The contract for building the plant complete was let to the Wolf Company, Chambersburg, Pa., without competition. Among the late contracts closed by this concern are: Henry Ahrens, of Reading, Pa., a complete 40 barrel modern mill; Derr & Neighbors, of Lewistown, Md., two 18 inch standard "Wolf Keiser" turbine water-wheels and power transmitting machinery, through John T. Pensinger, general Southeastern agent; McCutchen & Campbell, Ellis, W. Va., 25 barrel roller mill, through Jas. J. Pollard, general central agent; building new 200 barrel roller mill at Lidgerwood, N. D., for the Lidgerwood Mill Co., through W. O. Everett, general Northwestern agent; W. L. Slocum, Lawrence Station, N. J., a complete 60-barrel roller mill, through M. N. Hartz, general Atlantic agent; E. B. Morrison, Russellville, Pa., a 9x18 "Columbian" roller feed mill, Dison corn and cob crusher and lot of power transmitting machinery also, through Mr. Hartz.

BUSINESS is very active with the J. H. McEwen Manufacturing Co., Ridgway, Pa., and an enlarged demand is noted for the engines built at its works. Recent sales included the following: Two 150 horse-power simple direct connected to General Electric generators, Continental Hotel, Philadelphia; one 350 horse-power simple direct connected to Walker generator, Akron Street Railway Co.; two sixty horse-power tandem compounds direct connected to C. & C. generators, Dundee Rapid Transit Co., Elgin, Ill.; one fifty horse-power simple to Parmelee Eccleston Lumber Co., Jacksonville, N. C.; two 130 horse-power tandem compounds to R. Dunsmair & Co., San Francisco, Cal.; two 300 horse-power to Granite Steel Co., East St. Louis, Mo.; one 150 horse-power simple engine to Huntingdon Electric Light Co., Huntingdon, Pa.; one 175 horse-power simple for J. H. Somers Fuel Co., Belle Vernon, Pa.; one 280 horse-power tandem compound to Scranton Electric Construction Co., Scranton, Pa.; one 125 horse-power to New York & Pennsylvania Company, Johnsonburg, Pa.; one eighty-five horse-power simple to Independent Electric Co., Atchison, Kan.; one 100 horse-power to New York & Scranton Coal Co., Peckville, Pa.; one 125 horse-power simple to Young & Harrington Coal Co., Shippler, Pa.; one 175 horse-power simple to Walter & Ferris Coal Co., Salem, Ohio, and one 125 horse-power simple to Scranton Electric Construction Co., Scranton, Pa.

THE career of Peter Townsend Austen, Ph. D., F. C. S., a prominent American chemist who devotes his time to the industrial side of chemistry, shows a busy life. Dr. Austen was graduated at the Columbia College School of Mines, after which he studied for nearly four years in Germany under Prof. A. W. Hofmann, who was much impressed with the energy and enthusiasm of the young American. On his return to this country he has filled the chair of chemistry at Dartmouth College, Rutgers College and the New Jersey State Scientific School, and is now director of the chemical department of the Brooklyn Polytechnic Institute. He has also held the positions of chemist and inspector to various municipalities. He is the presiding officer of the New York section of the American Chemical Society, civil-service examiner in chemistry for the city of Brooklyn, and adviser on matters relating to chemistry to the Brooklyn department of city works and the department of charities and corrections. He has been a member of many well-known societies, and is an industrious literary worker. While much of his investigation has been for industrial purposes, he has found time to devote attention to purely scientific research. His papers, which include nearly fifty titles, have appeared in the leading journals here and abroad, and he has also published several text-books. As a lecturer Dr. Austen has met with much success, and when university extension was taken up by Rutgers, he was asked to introduce it. As an expert chemist in court Dr. Austen has achieved a high reputation, and is retained as expert chemist and adviser by a number of large business houses. He has made many valuable discoveries and inventions in the improvement of working methods, utilization of wastes and invention of new processes and products. He has also found new applications for a number of well-known articles, and has been successful in finding uses for new or unapplied substances. Dr. Austen's experience in patent cases leads to his being frequently consulted as to the drafting of chemical patents and the probable success of new enterprises.



# CONSTRUCTION DEPARTMENT.

**WE PUBLISH**, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

\*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

**Alabama City—Cotton Mill.**—The Dwight Manufacturing Co., of Chicopee, Mass., will expend \$500,000 on the erection of a cotton mill at Alabama City, near Gadsden; 25,000 spindles will be put in.

**Anniston—Furnace to Resume.**—The reorganization of the Woodstock Iron Co. into the Woodstock Iron Works has been perfected, and Wm. G. Ledbetter was elected president; Hoffman Atkinson, secretary, and James W. McCulloh, treasurer. First-mortgage bonds for \$250,000 will be issued at once and complete repairs made to the blast furnace.

**Bessemer—Woodworking Plant.**—The Krebs Manufacturing Co. is adding considerable machinery to its plant.

**Birmingham—Lubricant Works.**—The Birmingham Paint, Oil & Roofing Co. expects to make graphite lubricants in the near future.\*

**Eufaula—Electric-light and Water Works.**—A bill has been introduced in the legislature authorizing the city to buy and operate water works, gas and electric-light plants. Address the mayor.

**Florence—Hoop Factory.**—A large hoop factory to employ seventy-five hands will be erected at once.

**Florence—Wind-mill Factory.**—A large wind-mill factory is reported as to be established.

**Florence—Tank Works.**—Messrs. A. R. & J. H. Dempster, of Beatrice, Neb., have purchased the Bennie Bucket Factory from A. P. Smith. The plant will be converted into a factory for making water-tanks, wooden cisterns and wind-mills.

**Gadsden—Coal Mines.**—E. G. Lafollet has formed the Etowah Coal & Coke Co. to mine coal, etc.

**Mobile—Cigar Factory.**—The I. M. Cigar and Tobacco Factory has been incorporated with Leopold Strauss, president; F. W. Carmelich, vice president, and Julius S. Owen, secretary; capital stock \$20,000.

**Opelika—Sewerage System.**—The city will petition the legislature for authority to issue \$25,000 of bonds for sanitary sewerage.

**Opelika—Cotton Mill.**—The erection of a cotton mill is talked of.

## ARKANSAS.

**Fayetteville—Water Works.**—The Fayetteville Water Co. has been incorporated by W. B. Rees, Chas. A. Rees, of Joplin, Mo., and Chas. W. Trott, of Fayetteville; capital stock \$50,000. Water works will be constructed.

**Jonesboro—Planing Mill.**—The J. F. Tschudy Lumber Co., of Kansas City, Mo., will erect a planing mill at Jonesboro.

## FLORIDA.

**Jacksonville—Fertilizer Company.**—The Industrial Fertilizer Co., capital \$50,000, has been incorporated with Telfair Stockton, president; E. C. Patterson, secretary; T. P. Denham, treasurer.

**Martí City—Cigar Factory.**—Benjamin Rheinauer, Henry Perozo and Vasedro del Real have incorporated the La Criolla Cigar Co. to manufacture and sell cigars; capital stock \$10,000.

**Pensacola—The Gulf Transit Co.** will be chartered to export coal, etc. M. H. Smith will be president; H. W. Bruce, vice-president, and W. H. Reynolds, secretary-treasurer; capital stock \$200,000.

**Tampa—Box Company.**—The Tampa Box Co., to make packing boxes, etc., has been incorporated by August Roesler, of New York; Henry Leiman and A. A. Wood, of Tampa; capital stock \$500.

## GEORGIA.

**Adel—Planing Mill.**—J. H. Knight & Son are building a planing mill.

**Americus—Cotton Mill.**—A plan is afoot to secure a 7000 or 8000-spindle cotton mill.

**Atlanta—Box Factory, Printing Boxes, etc.**—Wenhouse & Sons are erecting a new factory building, and expect to put in machinery for printing, embossing and manufacturing paper boxes.

**Atlanta—Hosiery Factory.**—It is reported that a Massachusetts party will establish a hosiery factory.

**Augusta—Real Estate.**—Henry H. Cumming, E. F. Verdery, J. B. Tutt and others have incorporated the Richmond Land Co. to deal in real estate. The capital stock is \$6000, with privilege of increasing to \$100,000.

**Leighton—Lath and Shingle Mill.**—Mallet Bros. will put in a shingle and lath mill.

**Mineola—Lumber Mill.**—The Mineola Lumber Co., reported last week as incorporated, is enlarging its plant and putting in electric lights.\*

**Quitman—Heading Factory.**—A. McEachern and Edw. Blount will engage in manufacturing patent barrel heads.

**Rockmart—Ochre Mills.**—The Rockmart Sienna Co. has made extensive changes in its ochre mills.

**Rockmart—Slate Quarries.**—The Southern Slate Co. will put its slate quarries in operation at once upon an enlarged scale.

**Thomasville—Electric-light Plant.**—Jno. H. Davidson and Remur McIntyre have purchased the Thomasville electric-light plant.

**Waltherville—Turpentine Distillery.**—E. P. Miller has rebuilt his turpentine distillery, lately burned.

## KENTUCKY.

**Ashland—Iron Furnace.**—The Ashland Coal & Iron Co. has leased the blast furnace of the Norton Iron Works.

**Louisville—Machine Shop.**—The Cleveland, Cincinnati, Chicago & St. Louis Railroad Co. (office, Cincinnati) will establish repair shops at Louisville.

**Louisville—Cooperage Plant.**—The National Cooperage Co., of La Crosse, Wis., will establish a plant in Louisville.

## LOUISIANA.

**Baton Rouge—Barrel Factory.**—John S. Allen & Co. have removed their stave and heading factory from West Unity, Ohio, to Baton Rouge, La. They have a capacity of 6000 staves per day, and will make ash and oak staves for light barrels; also will make 100 cypress molasses barrels per day.

**Hammond—Electric-light and Ice Plant.**—W. D. St. Clair will install an electric-light and ice plant, part of the machinery having already been bought.

**Marksville—Bridges, etc.**—Bids are wanted for one drawbridge and several pile bridges for the St. Louis, Avoyelles & Southwestern Railway Co. Address F. M. Welch, president.

**New Orleans—Wharfage.**—The Texas & Pacific Railroad Co. will construct a wharf to cost \$60,000.

## MARYLAND.

**Baltimore—Drugs, etc.**—The William H. Read Drug & Chemical Co., for the manufacture of drugs, chemicals and patent medicines, has been incorporated by William H. Read, John J. Gilbert, Albert R. Mettee and P. Z. Perkins, of Baltimore city, and James P. Reese, of Baltimore county, with a capital stock of \$50,000.

**Cumberland—Machine and Repair Shops, etc.**—The Baltimore & Ohio Railroad Co.'s proposed new machine and repair shops will include a building 600 feet long, roundhouse for forty-four engines, electric-power plant, saw mill, etc., all equipped with the latest machinery.

**Elkton—Creamery.**—E. W. Dawson will establish a creamery at West Amwell, near Elkton.

**Elkton—Flour Mill.**—Dominick McElwee is erecting an addition to his flour mill and putting in new machinery.

**Ellicott City—Cooperage.**—Frederick King & Son have determined to rebuild their cooper shop. The new shop will be 100x25 feet, and will give employment to thirty coopers.

**Frederick—Fire-alarm System.**—The fire companies are endeavoring to secure the establishment of a fire-alarm system. Address the Junior Fire Company.

**Highland—Creamery.**—A new creamery is to be established by Lee J. Eyre.

## MISSISSIPPI.

**Meridian—Rosin and Turpentine Plant.**—S. Lichtenstein will establish a plant for the manufacture of turpentine and rosin to employ 100 men; machinery all purchased.

## MISSOURI.

**Kansas City—Land Company.**—The Old Mexico Land Co., capital \$25,000, has been incorporated by R. M. Snyder, Louis Kunze, Wm. G. Melville and others.

**Kansas City—Packing-house.**—The Schwarzschild & Sulzberger Packing Co. is enlarging its plant.

**King City—Lumber Company.**—The DeMund-Liggett Lumber Co., for general lumber purposes, has been incorporated by H. P. DeMund, C. E. DeMund and J. W. Liggett; capital stock \$12,000.

**Neosho—Electric-light Plant.**—Owen Ford, of St. Louis, who lately obtained electric-light franchise, is arranging to erect a plant.

**Republic—Flour Mill.**—R. C. Stone is rebuilding his flour mill.

**Richmond—Water Works.**—An ordinance is being submitted granting a franchise for water works. Address W. T. Shoop, chairman committee.

**Shell City—Flour Mill.**—The Columbia Roller Mill Co. has been incorporated with a capital stock of \$7400 by F. H. Divion, H. Krutzel and Henry Fastabel.

**St. Louis—Bakery.**—A. M. Baker has prepared plans for a bakery three stories high, 44x60 feet, to cost \$15,000.

**St. Louis—Food Company.**—The Layton Pure Food Co. has been incorporated with an all-paid capital stock of \$3000.

## NORTH CAROLINA.

**Concord—Cotton Mill.**—Messrs. Lippard are trying to organize a cotton-mill company.

**Elizabeth City—Box Factory.**—The Blades Lumber Co. is adding new machinery to its box factory.

**Fayetteville—Shuttle-block Factory.**—Mr. Weedon, of Sanford, will remove his shuttle-block factory to Fayetteville and enlarge operations.

**Fayetteville—Telephone System.**—The Southern Telephone Co. has secured franchise, and will build telephone exchange.

**Gastonia—Cotton-mill Addition.**—The Modena Cotton Mills will put in 2500 additional spindles.

**Goldsboro—Veneer Works.**—A stock company with from \$10,000 to \$250,000 capital is being formed for the purpose of manufacturing all kinds of veneered vegetable, fruit and grocers' packages and furniture veneering. The Standard Lumber Co., Box 529, can give information.\*

**Waynesville—Creamery.**—Alden Howell has purchased the Waynesville creamery.

**Waynesville—Water Works.**—The citizens are considering a petition to the legislature for authority to issue bonds for water works. Address the mayor.

**Weldon—Factory.**—Michigan parties are negotiating for water-power for a factory. The Roanoke Rapids Power Co. can be addressed.

## SOUTH CAROLINA.

**Clifton—Cotton Mill.**—The Clifton Manufacturing Co. will erect a new cotton mill of 16,000 to 18,000 spindles and 500 to 600 looms, to be operated entirely by water-power.

**Columbia—Bridge Company.**—A bill incorporating the Wappoo Bridge Co. has been introduced in the legislature.

**Graniteville—Cotton Mill.**—The Graniteville Manufacturing Co. has purchased \$40,000 worth of additional machinery for its cotton mill.

**Greenville—Cotton Mill.**—The organization of the third new cotton-mill company is now under way. A \$100,000 company is proposed, and subscriptions for \$50,000 have been received. O. P. Mills will probably be president.

**Laurens—Hosiery Mill.**—Northern parties contemplate establishing a hosiery mill.

**Laurens—Sugar Factory.**—It is reported that a representative of German capitalists has announced that a \$600,000 beet-sugar factory will be built in Laurens. Hon. W. M. Irby can possibly inform.

**Wateree—Cotton Mill, etc.**—A bill has been introduced in the legislature to incorporate the Wateree Cotton Mills & Power Co.

## TENNESSEE.

**Athens—Electric-light Plant.**—An electric-light plant is to be put in by the Athens Roller Mills.

**Charleston—Flour Mill.**—Saulpaw Bros are erecting an addition to their flour mill, and will put in machinery, increasing capacity to 100 barrels daily.

**Clarksville—Tobacco and Snuff Factory.**—Meriwether & Co. will at once commence equipping a plant for the manufacture of snuff, plug and smoking tobacco.

**East Chattanooga—Woodworking Factory.**—The Curtain Pole Manufacturing Co. is erecting an additional building 80x200 feet, which will be

equipped with new machinery, and forty more hands will be employed.

**Harriman—Canning Factory.**—F. R. Hawkins, of Anderson, Ind., is endeavoring to arrange for the erection of a canning factory.

**Knoxville—Highway Bridge.**—W. C. Crozer, C. E., will make surveys, plans and estimates for the construction of a highway bridge across the Tennessee river at Knoxville. The bridge will be 1700 to 1900 feet in length. For particulars address above.

**Knoxville—Knitting Mill.**—The Knoxville Knitting Mills may put in more machines.

**Knoxville—Coffin Factory.**—The Knoxville Coffin Co. has been organized with J. B. Ziegler, president; A. G. Mann, vice-president, and Thomas Keller, secretary; factory now in operation.

**Knoxville—Excelsior Factory.**—The Knoxville Coffin Co. will engage in manufacturing excelsior.

**Lewinsburg—Pencil Factory.**—The American Cedar Pencil Co. will erect a large factory. Lands have been bought and site selected.

**McMinn County—Iron Mines.**—The Chilhowee Mining Co. has been incorporated by E. Cary, Chas. Seymour, Norman B. Morrell, Geo. Brownlow and W. R. Tuttle, of Knoxville. Iron mines will be developed at once in McMinn county.

**Memphis—Furniture Factory.**—The Young Men's Business League has a proposition for the establishment of a furniture factory representing \$75,000 capital.

**Moltke—Coal Mines.**—David Abernathy will develop coal deposits on the Tom Paine lands, near Moltke.

**Pulaski—Mercantile.**—The Pulaski Dry Goods Co. has been organized for mercantile purposes with a capital stock of \$25,000. L. E. Abernathy is president, and Mark Arrowsmith, secretary and treasurer.

**Rockwood—Water Works.**—The city contemplates constructing water works. Address C. F. Steinwehr, city recorder.

## TEXAS.

**Austin—Electrical Apparatus.**—The regents of the University of Texas contemplate enlarging the electrical apparatus, obtaining water-power, etc.

**Corsicana.**—The Corsicana Musical Co., with capital of \$2000, has been incorporated by H. T. McCullom and others.

**Cristoval—Irrigation.**—The Louisa Mores Irrigation Co. has been chartered with a capital stock of \$100,000 for the purpose of constructing dam for irrigation. Incorporators are P. H. Mores, Mark Fury and Frederick Mores.

**Galveston—Construction Company.**—The Galveston-Houston Construction Co. has been incorporated with a capital stock of \$10,000. Incorporators, William T. Sherwood, of Galveston; F. H. Peters, of Chicago; S. F. Carter, of Houston; W. S. Hunt, of Houston, and W. F. Hammett, of St. Louis. Purpose, to construct railroads and bridges for railroad companies.

**Hillsboro—Publishing.**—Preston Ivey has commenced the publication of the Evening Picayune.

**Houston—Gas Plant.**—It is said that a Pintsch gas plant will be built.

**Laredo—Irrigation.**—The Manadas Irrigation Co. has been incorporated with a capital stock of \$10,000 by J. S. Taylor, C. A. Higby and G. N. Howell. Purpose, to construct canals for irrigation, etc.

**McKinney—Water Works.**—It is reported that the construction of water works is contemplated. Address the mayor.

## VIRGINIA.

**Alexandria—Planing Mill.**—T. V. Reishell is equipping a planing mill.

**Broadway—Flour Mill.**—J. E. Beard and associates, noted last week, form the Broadway Milling Co., and have already let contract for their mill.

**Manchester—Woodworking Factory.**—A charter has been granted to Reams Bros. & Co. to establish a mill for the purpose of carrying on all kinds of woodwork. The capital stock is not to be less than \$5000 nor more than \$25,000. President, Jas. L. Robertson; vice-president, C. S. Reams; secretary and treasurer, F. B. Dunford; directors, Jas. L. Robertson, C. S. Reams, F. B. Dunford, B. J. Duval and J. A. Reams.

**Manchester—Woodenware Company.**—The Manchester Woodenware Co. has been incorporated for woodenware and cooperage business by N. D. Shotwell, W. L. Sydar, J. P. Shotwell, W. E. Taylor and Thomas H. Beattie; capital stock \$10,000.

**Richmond—Tinplate Plant.**—The Old Dominion Iron & Nail Works Co.'s new tinplate mill was not destroyed by the late fire; only the building was damaged. Operations have been resumed.

**Richmond—Telephone Franchise.**—Samuel Reg-



ester and associates have applied to the city for telephone franchise.

**Roanoke—Publishing.**—M. H. Clayton has purchased the Roanoke Times and will organize a \$20,000 company to continue publishing same.

#### WEST VIRGINIA.

**Ellis—Flour Mill.**—McCutchen & Campbell have awarded contract for a 25 barrel roller flour mill.

**Fairmont—Ice Plant.**—Incorporation has been granted to the Fairmont Ice Co. with a capital stock of \$200,000. A. B. Fleming, Hon. C. L. Smith, Wm. A. Ohley, J. E. Watson, O. S. McKinney and others, all of Fairmont, are the incorporators.

**Huntington—Lumber Plant.**—Samuel W. Frost has removed his lumber-finishing plant from Cincinnati to Huntington; capacity 60,000 feet daily, and employ 100 hands.

**Thomas—Lumber Company.**—The Middle Mountain Boom & Lumber Co., with its principal office at Thomas, has been granted a charter; capital stock \$100,000. Incorporators, Wm. Daniel and Samuel Rosendorf, of New York city; B. Schelansky and B. Slatz, of Thomas, W. Va.

**Union—Corn and Lumber Mill.**—S. O. Meredith will equip a corn mill, saw mill and planer. Next spring he will put in a roller flour mill.

#### BURNED.

**Alpha, Ga.**—J. P. Galloway's saw mill.

**Baton Rouge, La.**—Flynn Bros.' cotton gin.

**Brookhaven, Miss.**—Daniel Schwem's cotton gin.

**Chattanooga, Tenn.**—The Southern Hotel; loss \$40,000.

**Chattanooga, Tenn.**—M. B. Parham's mattress factory damaged.

**Elmo, Texas.**—H. D. Richardson's cotton gin.

**Elmo, Texas.**—Henry Richardson's cotton gin.

**Hempstead, Texas.**—T. B. Gable's cotton gin.

**Irene, S. C.**—The Red Bank Mills, manufacturers of cotton goods.

**Moberly, Mo.**—Moberly High School building; loss \$25,000.

**Mumford, Texas.**—Ed. Wilson's cotton gin.

**Orlando, Fla.**—A. S. Rogers's planing mill.

**Perryman, Md.**—Creamery owned by Chas. W. Michael and others; loss \$4500.

**San Augustine, Texas.**—F. H. Greer's grist mill and gin.

#### BUILDING NOTES.

**Atlanta, Ga.—Exposition Building.**—Tennessee is to be represented at the exposition with a building of Tennessee marble. C. W. Dabney, Jr., Assistant Secretary Agriculture, Washington, D. C., can be addressed.

**Atlanta, Ga.—College.**—A bill has been introduced in the legislature by Mr. Boifeuillet to appropriate \$50,000 for buildings for the Georgia Normal and Industrial College.

**Atlanta, Ga.—Natorium.**—J. W. Rice will build a natatorium.

**Atlanta, Ga.—Exposition Building.**—Bids will be received until January 2 for erecting the United States government building at the Atlanta Exposition. See advertisement in MANUFACTURERS' RECORD of December 14.

**Atlanta, Ga.—Business Building.**—The trustees of Emory College have purchased site for \$65,000 on which they will erect a business building.

**Atlanta, Ga.—Exposition Buildings.**—Sealed proposals will be received until January 2 for erecting the United States government buildings at the exposition. Address A. C. Bruce, architect.

**Baltimore, Md.—Horse-show Building.**—Henry Brauns has completed plans for the Maryland Horse Show Association buildings. Over \$100,000 will be expended. Address Robert Hough, secretary.

**Baltimore, Md.—Hotel.**—It is reported that Wm. D. McLaughlin will build a hotel.

**Baltimore, Md.**—Joel Gutman & Co. will enlarge their business building.

**Baltimore, Md.—Residences.**—D. M. Newbold and R. S. Carswell have purchased land for \$35,000 on which they will erect twelve three story brick residences.

**Baltimore, Md.—School.**—George Worthington has completed plans for primary school No. 35 to cost over \$25,000.

**Baltimore, Md.—Warehouse.**—Chas. E. Cassell has prepared plans for the six-story \$60,000 warehouse which Jos. M. Cone proposes to erect.

**Beaumont, Texas—Jail.**—Bids will be received by the commissioners' court of Jefferson county, February 11, 1895, for the construction of a brick jail with steel cells, cost not to exceed \$12,000 complete; plans and specifications to accompany bids. Address all communications to Ed P. Gray, county judge.

**Belton, Texas.—Opera house.**—The proposed opera-house company has placed \$7000 of stock and will place \$3000 more. Erection of building will soon be commenced. Address S. M. Ray.

**Colonial Beach, Va.—Hotel.**—Charles E. Brayton will erect a 17-room addition to his hotel.

**Covington, Va.—Hotel.**—The Interment Hotel Co. will erect an addition to its hotel.

**Crowley, La.—Dwelling.**—J. F. Shoemaker will erect a \$5000 dwelling.

**Dillon, S. C.—School.**—A bill has been introduced in the legislature to authorize Dillon to issue bonds for building a school.

**Greeneville, Tenn.—Orphanage.**—The Holston Conference of the Methodist Episcopal Church will erect an orphanage and industrial home, probably at Greeneville. Address Mrs. John E. Chapman, Fifth avenue, Knoxville, Tenn.

**Greensboro, N. C.—Hotel.**—The Benbow House will be enlarged.

**Heathsville, Va.—Hall.**—Contract for building the Masonic lodge hall has been let to Montgomery Bros., of Washington, D. C.

**Hendricks, W. Va.—Warehouse.**—The Hendricks Co. is building a three-story warehouse, 40x80 feet.

**Louisville, Ky.—Clubhouse.**—The Iroquois Wheeling and Driving Club will erect a clubhouse; capital \$5000.

**Louisville, Ky.—Business Building.**—Crutcher & Starks will examine designs for the new building which they will erect. The building will be six stories and cost nearly \$100,000.

**Louisville, Ky.—Flats, etc.**—D. X. Murphy & Bro. have prepared plans for a double store and flat building to be erected for Charles Rosenheim, to be three stories high, and have electric bells and lighting; cost \$12,000. Same architects prepared plans for a residence to be erected at Lebanon, Ky., to have electric bells, etc.; cost \$5000.

**Monroe, La.—School.**—Contract has been let to Frank O'Brien at \$5000 for the erection of a new high-school building.

**Norfolk, Va.—Schools.**—The school board has adopted a resolution calling upon the council to appropriate \$100,000 for three new school buildings. Address the mayor.

**Richmond, Va.—Church.**—Site has been purchased for \$6500 for a new Methodist church. Address C. K. Willis.

**Springfield, Mo.—Residence.**—Charles McCan will erect a residence to cost \$3000 to \$5000.

**St. Louis, Mo.—Dwellings, etc.**—Building permits have been issued to W. A. Sneezy for two-story dwelling to cost \$15,000; to Central Security Association for four dwellings to cost \$15,000; to G. H. Lewis for dwelling to cost \$10,000; to L. M. Hellman for dwelling and stable to cost \$21,500; to George T. Furdea for three dwellings to cost \$15,000, and to St. Louis Dressed Beef Co. for storage-house to cost \$7000.

**St. Louis, Mo.—Flats, etc.**—Matthews & Clarke have prepared plans for flat building to be erected for Mrs. C. Yengst to have electric bells, etc.; cost \$6000. Same architects prepared plans for dwelling for Mrs. H. Cuhl to have electric bells, etc.; cost \$5000. A. Blair, Ridington, has prepared plans for dwelling to have architectural iron work, iron columns, mosaic tiling, beveled and cathedral glass, electric bells and lighting, steam heating, etc.; cost \$25,000. Same architect prepared plans for flat building for C. W. Randell to have slate and composition roof, electric bells, etc.; cost \$5000. J. H. McNamara has plans for dwelling for Mrs. John P. Boyce to have electric bells, steam heating, etc.; cost \$10,000.

**St. Louis, Mo.—Storage-house.**—The J. Brown Storage Co. will build a storage-house to cost \$20,000.

**St. Louis, Mo.—Dwelling.**—Charles Coulogan will erect a \$5000 dwelling.

**Sumter, S. C.—Courthouse.**—A bill has been introduced in the legislature to authorize Sumter county to issue bonds for \$15,000 to repair courthouse, etc. Address county clerk.

**Waco, Texas.—Storehouse.**—W. W. Larmour has prepared plans for a store to be erected by Richard Coke at a cost of \$20,000.

**Washington, D. C.—Dwelling, etc.**—Jas. G. Bowen will erect a dwelling to cost \$5000; O. W. White, five dwellings to cost \$75,000.

**Washington, D. C.—Dwellings.**—D. B. Gottwals has permit to build two three-story dwellings to cost \$8000.

**Washington, D. C.—Warehouse, etc.**—J. W. Thompson and associates will convert the Panorama Building into a fire-proof storage warehouse, five stories high, to cost \$35,000. O. W. White will build five three-story buildings to cost \$75,000.

**Washington, D. C.—Residences.**—Baker & Lampson have obtained permit to build nine three-story residences to cost \$55,000.

**Washington, D. C.—Dwellings.**—Barnie C. Hauback has obtained permit to erect three three-story dwellings to cost \$18,000.

**Weldon, N. C.—Hotel.**—Plans are ready for the new hotel to be built near Weldon by the Roanoke Rapids Power Co. (W. M. Habliston, of Petersburg, Va., president).

**West Arlington, Md.—Residence.**—Herman Bernheimer, of Baltimore, will erect a residence to cost \$12,000.

**Weston, W. Va.—Church.**—Plans are wanted for

an Episcopal church to cost \$5000 to \$6000; nave to seat 250; a west transept for Sunday school room to seat 130. Address Rev. W. H. Burkhardt.

**West Point, Va.—School.**—The West Point Male Academy will erect a new two story building 28x44 feet.

#### RAILROAD CONSTRUCTION.

**Alderson, W. Va.**—E. Smith, one of the incorporators of the Sugar Creek, Parks Branch & Paint Creek, writes the MANUFACTURERS' RECORD that the road is to traverse coal and timber lands in Fayette, Kanawha and Raleigh counties. It will be forty-three miles long. He states that he has between \$20,000 and \$40,000 in stock subscriptions promised him, also several tracts of coal land. The company is not yet organized.

**Austin, Texas.**—The Missouri, Kansas & Texas has asked for State permission to extend its road from San Marcos to San Antonio, fifty miles. It is understood that construction is to begin immediately. Thos. G. Purdy, of Parsons, Kans., may be addressed.

**Bartow, Fla.**—It is stated that the Florida Engineering & Construction Co. will build the proposed 150-mile line across the State from Indian river to Charlotte Harbor. D. E. Ryan is general manager, and A. T. Otto is president. [The MANUFACTURERS' RECORD is also reliably informed that C. C. Smith is interested in the same company, which comprises several Chicago parties. The route is from the Indian river, on the east coast, northwest along the Kissimmee river valley, connecting with the Florida Southern at Bartow, thence to Charlotte Harbor, on the Gulf of Mexico. The road will traverse a part of the Disston Land Co.'s property.—Ed.]

**Beaumont, Texas.**—President John H. Kirby, of the Gulf, Beaumont & Kansas City Company, writes the MANUFACTURERS' RECORD that his line will be eventually extended from Beaumont to Sabine Pass, thirty miles distant.

**Charleston, W. Va.**—John H. Drake, managing director of the Charleston, Clendennin & Sutton, writes the MANUFACTURERS' RECORD that the \$3,000,000 in bonds recently issued is to extend the line from its present terminus to Sutton, W. Va. The company is now ready to let contract for the work between Clendennin and Clay Courthouse. Surveys have been completed. Contractors may address Mr. Drake.

**Columbia, S. C.**—Railway bills introduced into the South Carolina legislature include the incorporation of the Walterboro & Western and the Metropolitan Street Railway Co.

**Columbia, S. C.**—Representative Todd has introduced a bill into the legislature to incorporate the Greenwood, Anderson & Western Railway.

**Columbus, Ga.**—Receiver Flournoy, of the Georgia Midland & Gulf, confirms the report that the road may be extended to Atlanta, and informs the MANUFACTURERS' RECORD that the parties considering the extension are able to carry out the plans.

**Dallas, Texas.**—The city is endeavoring to raise \$35,000 to be placed in terminal railway bonds. It is stated that if the terminal line is built the St. Louis Southwestern Company will extend its system to Dallas. President Sanger, of the Dallas Commercial Club, is interested.

**Denison, Texas.**—Citizens of Denison are endeavoring to raise a bonus of \$50,000 to secure the shops and offices of the Galveston & Great Northern, projected between Denison & Niobrara, Neb. Edward Palmer, of New York, is president.

**Fort Smith, Ark.**—One of the promoters of the Fort Smith, Paris & Dardanelles road writes the MANUFACTURERS' RECORD that John R. Stevenson, Jr., of Philadelphia, is endeavoring to obtain right of way in Fort Smith for the line. No company has as yet been organized.

**Galveston, Texas.**—The North Galveston, Houston & Kansas City road, recently sold, has been purchased by St. Louis and other capitalists represented by C. H. Hammett and Hon. T. W. Ford, of Houston. It is stated that the line will be built from La Porte to North Galveston, sixteen miles, and that it will be connected with the Galveston Western by a bridge from Virginia Point across West Bay.

**Hinton, W. Va.**—The Hinton & New River Railway Co., which is to be assisted by \$30,000 in stock subscribed by Summers county, will build from Hinton, on the Chesapeake & Ohio, to Glen Linn, Mercer county, on the Norfolk & Western. It will be twenty six miles long, with a branch thirty miles long up Bluestone river valley. J. T. McCreery, of Coal Gate, Va., is president, and J. C. James, of Hinton, vice president.

**Houston, Texas.**—It is stated that Kountz Bros., New York bankers, and Texas land-owners are back of a project to build a road from Houston to Sabine Pass.

**Huntington, W. Va.**—It is stated that the Ohio River road is to be extended from Huntington to connect with the Chesapeake & Ohio at Ashland, Ky.

**Kennett, Mo.**—J. E. Franklin, a Fredericktown (Mo.) capitalist, has become interested in the 24-mile line between Kennett and Caruthersville,

to be built by Louis Houck, of Cape Girardeau. The county has taken \$15,000 of the company's bonds. About ten miles of the road have been graded.

**Knoxville, Tenn.**—Charles H. Brown, of the company interested in the proposed line from Jellico to Port Royal, S. C., by way of the Port Royal & Augusta, writes the MANUFACTURERS' RECORD that "the project is to be started at once."

**Little Rock, Ark.**—It is stated that the business bodies of the city have adopted the proposition of the Little Rock & Pacific Company, to build a road from Little Rock to Wister Junction, along the Arkansas river valley. The citizens agree to give \$200,000 cash and forty acres of land for yards, etc. Gov. W. M. Fishback is president of the company.

**Louisville, Ky.**—The board of public works is considering the idea of constructing several tunnels under city streets for railway tracks. City Engineer Mehler may be addressed.

**Louisville, Ky.**—Chesapeake, Ohio & Southwestern engineers are making surveys for a shorter route between Calvert City and Mayfield stations. It is stated that the Illinois Central, which now controls the Chesapeake, Ohio & Southwestern, will build the new road, which will be twenty miles shorter than the other; also that the Chesapeake Ohio & Southwestern, between Paducah and Louisville, will be relaid with 75-pound rails. J. F. Wallace, at Chicago, is chief engineer.

**Marksville, La.**—Prest. F. M. Welch, of the St. Louis, Avoyelles & Southwestern, informs the MANUFACTURERS' RECORD that it is expected to complete the line, which comprises thirty-six miles yet to be built, in six months. Considerable bridge work is to be done. Only a part of the contracts have been let.

**Montgomery, Ala.**—A bill is pending in the legislature to incorporate the Phoenix City Railway Co.

**Pearisburg, Va.**—It is stated that twelve miles of the Mountain Lake road have been contracted for, and that ties and rails are now being laid. This is the line in which S. S. Chisholm, of Mountain Lake, is interested.

**Rowlesburg, W. Va.**—Surveys are being completed for the Cheat River road, which is to be 100 miles in length, extending from Point Marion, Pa., to Rowlesburg.

**Savannah, Ga.**—Director Barrow, of the Savannah Railway & Terminal Co., writes the MANUFACTURERS' RECORD that the company will build three miles of line in all. It will connect with the Charleston & Savannah, Florida Central & Peninsula and Georgia Central lines, and would be the natural terminus on the harbor for the Savannah, Americus & Montgomery when the latter is extended to Savannah. Bids from contractors will be received.

**Savannah, Ga.**—It is stated that the New York directors of the Atlantic Short Line have determined to complete it to Savannah. John R. Young, of Savannah, is president.

**Siloam Springs, Ark.**—H. D. Mackay, of Pomona, Mo., states that he has organized a \$100,000 company to build a road from Siloam Springs to Pomona. William Pitts is vice-president. The distance is about thirty miles.

**Sturgis, Ky.**—It is reported that work will soon begin on the eight-mile railway line to the Rock Springs coalfields. L. C. Garrett, of Chicago, and the St. Louis (Mo.) Construction Co. are interested.

**Sumter, S. C.**—It is understood that the Sumter & Wateree Railroad franchise is to be secured by the Ohio River & Charleston Company, and the latter will use it to build from Camden, the present terminus of the Ohio River & Charleston, to Sumter, where a connection will be made with other roads. Samuel Hunt, at Cincinnati, is general manager.

#### Electric Railways.

**Baltimore, Md.**—A summary of electric lines projected in and around the city shows the following: Baltimore-Washington Boulevard Co. will build thirty-two miles double track with 80 pound steel rails, block system, rock ballast; will need three \$60,000 power stations to generate 1000 horse power each and twenty 100 horse-power motor cars; for this line about 3000 poles will be used; address David M. Newbold (contracts partly let). Baltimore-Gettysburg electric line will have fifty-one miles of 70 to 80-pound steel rails, rock ballast; will need two power-houses capable of generating 2500 horse-power each, and 4500 iron or wooden trolley poles; about thirty motor cars will be needed; Hon. Frank Brown may be addressed. Edmondson Avenue, Catonsville & Ellicott City, ten miles 60 to 80 pound steel rails, double track, rock ballast, with one 1000 horse-power generating station; will need 900 poles and fifteen to twenty motor cars; address John Hubner, Catonsville, Md. Baltimore Traction Co., changing nine miles of cable road to the trolley system; will need about 600 iron poles, feed and trolley wires and electric rail connections; also may increase generating power at stations and add fifteen to twenty motor cars; address Hon. Frank Brown. Mount Washington electric road, two miles of 60 to 80-pound steel rails, double track, rock ballast, with 200 wooden poles and five fifty to



seventy-five horse-power motor cars; address George R. Webb, Clifton Park Electric Co., three and a-half miles double track, rock ballasted, 70 to 80-pound steel rails, 300 wooden poles, one 800 to 1000 horse-power station and five to ten motor cars; address Winfield J. Taylor or Eben B. Hunting, Baltimore, Middle River & Sparrow's Point, fifteen miles 60 to 80-pound steel rails, stone ballast, one 1000 horse-power station, twenty-five to thirty motor cars, about 1400 wooden poles; address George R. Willis (contracts partly let), Baltimore, Severn Park & Annapolis, twenty-eight miles single track, 60-pound steel rails, one 1200 horse-power generating station, 2500 wooden poles, with trolley and feed wire, forty to fifty motor cars; address Bready Bros. or D. S. Collett.

**Baltimore, Md.**—The Baltimore Traction Co. will make its extension to Clifton Park by way of its Waverly line, which is to be rebuilt for electric motors and extended. Hon. Frank Brown is president.

**Chattanooga, Tenn.**—The Chattanooga Electric Railway Co. has been granted a year longer in which to construct and complete its system.

**Grafton, W. Va.**—Several business men are endeavoring to form a company to build an electric line between Grafton and Pruntytown.

**Jackson, Tenn.**—The Jackson Suburban Street Railway Co. is considering the idea of rebuilding its line for the trolley system. It is seven miles long. J. L. Wisdom is general manager.

**Kansas City, Mo.**—The Vine-street electric line is to be relaid with 100-pound steel rails, according to the statement of General Manager Bernardin.

**Kingwood, W. Va.**—It is proposed to build an electric road to connect several of the larger towns in Preston county.

**Knoxville, Tenn.**—It is reported that the directors of the Knoxville & Fountain Head suburban road have decided to change it to a trolley road. George Bargfeldt and Curtis Cull are directors.

**Valdosta, Ga.**—It is stated that a company is being formed to build a short electric line on several of the city streets.

#### Cable Railways.

**Washington, D. C.**—The Columbia Railway Co. has asked permission of Congress to extend its cable road, now being built along Seventeenth and G streets and New Hampshire avenue, to the Potomac river. W. C. Battler is superintendent.

### MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

**Boiler.**—The Miller & Jones Lumber Co., Van Buren, Ark., is in the market for one sixty horse-power boiler with twelve to eighteen six-inch flues, new or second hand.

**Boilers.**—The Mineola Lumber Co., Mineola, Ga., will need three eighty horse power boilers complete.

**Boiler and Engine.**—E. H. Smith, Citronelle, Ala., wants prices on fifteen horse-power boiler and engine.

**Boiler and Engine.**—See "electric light plant."

**Boiler and Engine.**—Wanted, second hand engine and boiler, anywhere from fifty to 100 horse-power; must be in good condition. Address Z 69, Sun Office, Baltimore, Md.

**Brass Goods.**—W. L. Hinton, Hinton, W. Va., wants to buy all kinds of brass goods ready for plating.

**Bridge.**—Sealed proposals will be received until December 17 for the construction of an iron and steel bridge. Address A. H. Davidson, city engineer, Augusta, Ga.

**Burners.**—Walter S. Sharpe, Trenton, Ala., wants for a special purpose three or four burners for coal oil, suitable for gasoline for heating photo burnishers; burners to be twenty-four inches long.

**Cars.**—The Southern Pacific Railroad Co., New Orleans, La., J. Kruttschnitt, superintendent, is in the market for over 1000 freight cars.

**Cement, Fire-brick, etc.**—The Raleigh Electric Co., Box 144, Raleigh, N. C., needs cement, fire-brick, wire, poles, etc.

**Cotton Mill.**—W. J. Willingham, Atlanta, Ga., wants at once estimates on machinery for a \$200,-

000 cotton factory to manufacture yarns exclusively.

**Creamery Machinery.**—T. H. Ketchin & Co., Winstboro, S. C., wants to correspond with manufacturers of machinery for creamery, milk separators, etc.

**Dredging Apparatus.**—The Camp Phosphate Co., Albion, Fla., wants a grapple bucket for dredging (Heywood preferred).

**Electric-light Plant.**—The Luling Light & Power Co., Luling, Texas, will open bids on December 12 for complete electric light plant, including fifty to sixty-five horse-power boiler and engine, 500 to 600-light alternating current dynamo, with exciter and switch-board transformers, assorted sizes, for 300 lights; also 300 lamps, sockets, etc.; one car cedar poles, twenty-five feet long, four to six inches at top. Address C. Bellinger, secretary.

**Electric light Plant.**—W. P. Small, Owensboro, Ky., invites bids for the erection of an electric-light plant.

**Elevators.**—Sealed proposals will be opened December 27 for erecting two passenger elevators in the United States custom-house, New York, N. Y.; Chas. E. Kemper, acting supervising architect, Washington, D. C. (See advertisement in MANUFACTURERS' RECORD).

**Engine.**—The Georgia Mills & Elevator Co., Macon, Ga., is in the market for a seventy-five horse-power engine, one-quarter cut-off, seventy-five pounds steam pressure, to run 100 to 125 revolutions per minute.

**Engine.**—The Meridian Machine Shops, Meridian, Miss., will buy an 8x10 or 10x12 inch automatic engine.

**Engines.**—Proposals will be received until December 20 for furnishing three 16x15 high-speed, horizontal, centre-crank, single-valve, automatic steam engines for dynamos. Address Bernard R. Green, superintendent and engineer, Washington, D. C.

**Fan Blower.**—Wanted, a 25 to 30 inch fan blower. Address Tolman Steam Laundry, Washington, D. C.

**Fire Apparatus.**—The mayor of Nacogdoches, Texas, can be addressed regarding purchase of chemical engine.

**Flour Mill.**—W. P. Sykes, Cleveland, Tenn., wants complete equipment for flour mill, including water-wheel.

**Gas Engine.**—Wanted, second hand White & Middleton ten horse-power gas engine, latest improved. Address E 603, Sun Office, Baltimore, Md.

**Grinding Mill.**—The Birmingham Paint, Oil & Roofing Co., Birmingham, Ala., wants a mill for grinding graphite dry in foundry facings.

**Heading and Slave Machinery.**—Ellis L. Miller, Kimball, Va., wants to correspond with manufacturers of machinery for making heading and slaves.

**Lathe.**—The Chattanooga Foundry and Pipe Works, Bridgeport, Ala., may buy a lathe later on.

**Lathe.**—Indian River Ice Manufactory, Titusville, Fla., wants a second-hand engine lathe to swing ten to twelve inches and five or six feet bed.

**Locomotives and Coaches.**—John H. Kirby, Beaumont, Texas, wants two or three locomotives, sixty to seventy tons, standard gage, and two passenger coaches.

**Machine Tools.**—The Meridian Machine Shops, Meridian, Miss., will buy a turning and boring mill, hydraulic wheel press and exhaust shaving blower.

**Pipe.**—The water board of Baltimore, Md., expects to obtain bids shortly on 2, 3, 4, 6, 10 and 12-inch, and possibly 20 and 30 inch pipe; quantity undecided. Address Wm. L. Kenly, chief engineer.

**Planer.**—The Meridian Machine Works, Meridian, Miss., will buy wood planer to D D 6x18 inches for flooring and ceiling.

**Planer and Matcher.**—The Greer Machinery Co., Knoxville, Tenn., wants a light single-surface planer and matcher, second-hand.

**Planing-mill Machinery.**—The Mineola Lumber Co., Mineola, Ga., will need one surfacer, three matchers, one resawing and one rift machine.

**Rails.**—The Savannah Railroad & Terminal Co., Savannah, Ga., Pope Barrow, director, will be in the market for rails, etc., for three miles of road.

**Railway Supplies, etc.**—The St. Louis, Avoyelles & Southwestern Railway Co. will soon be ready to contract for thirty six miles of steel rails; also several standard-gage locomotives, passenger, freight and flat cars. Address F. M. Welch, president, Marksville, La.

**Rolling Stock, etc.**—The Savannah Railroad & Terminal Co., Savannah, Ga., Pope Barrow, director, will be in the market for rolling stock.

**Roofing.**—The Mineola Lumber Co., Mineola, Ga., wants bids on 10,000 square feet of steel roofing.

**Saw Mill.**—J. N. Capps, Asheville, N. C., wants prices on a 25,000 to 30,000 foot band saw mill, new or second-hand.

**Saw-mill Machinery.**—E. H. Smith, Citronelle, Ala., wants catalogues and prices on machinery for squaring timber for export.

**Scales.**—Wanted, portable scales to weigh coal on barrow. Address G 379, Sun office, Baltimore, Md.

**Separator.**—J. O. Shelburne, Keysville, Va., wants a separator for separating copper from the ore.

**Smelting Outfit.**—J. M. Berry, Bedford City, Va., wants a smelting outfit.

**Sugar Refinery.**—R. Martin and O. N. Nilson, St. Martinsville, La., will need complete outfit for sugar refinery.

**Telephone Equipment.**—The Southern Telephone Co., Fayetteville, N. C., is in the market for full equipment for telephone exchange; will want fifty to sixty telephones and 50 or 75-wire switch, and invite telephone-makers to submit prices.

**Veneer Machinery.**—The Standard Lumber Co., Box 529, Goldsboro, N. C., wants catalogues and prices of machinery for veneering.

**Water-wheel.**—See "flour mill."

**Water Works.**—Propositions for a water-works franchise will be received at Richmond, Mo., until January 1. Address W. T. Shoop for copy of ordinance.

**Weaving Machinery.**—J. A. Wellans, Wilmington, N. C., wants information and prices on looms for weaving towels and machinery for winding and beaming.

**Woodworking Machinery.**—E. H. Smith, Citronelle, Ala., wants catalogues and prices on machinery for turning out wooden baskets and crates.

### TRADE LITERATURE.

SUPPLYING boilers with feed water offers opportunities for practicing economy. It is claimed that a superior method to employ is the use of a pump driven by a belt taking its power from the main shafting, and not developing its own power by independent engines. The Leitch variable stroke pump has been designed to meet this want, and is said to overcome all objections. It is made by W. M. Leathly & Co., Richmond, Va., and described in a folder issued by this firm.

STREET railways equipped with electric power are now an essential feature of any thrifty community. Like all standard enterprises, they must be well planned and equipped if they are to be dividend-earners. Invention and discovery are continually adding to the efficiency of such roads, decreasing operating expenses and lessening first cost. It is interesting to note such changes, and literature on the subject always interests the practical men identified with such undertakings. A pamphlet has just been issued by the Sperry Electric Railway Co., of Cleveland, Ohio, describing the single-motor equipment introduced by this concern. In this equipment the driving-wheels are all coupled and revolve in unison, affording, it is claimed, greater efficiency than where a separate motor is coupled to each axle. A new system of electric brakes which has many points of excellence is also described. Tests of this system have shown some remarkable results.

A REFERENCE catalogue has been issued by the National Switch & Signal Co., of Easton, Pa. The interlocking machines, with their fittings, made by this concern are illustrated and described, and the system of numbers to be used in ordering explained. Illustrated descriptions are also given of the ground apparatus and connections, signals and fittings, station signal stands, special and auxiliary apparatus, signal towers, etc., supplied by this company. The different devices include late improvements, and their general adoption evidences the valuable and reliable service rendered. The illustrations and typographical arrangement of the catalogue and the concise style of the descriptive matter makes it convenient for quick reference. The catalogue is devoted to that branch of the company's product generally called mechanical work. A few electrical devices are shown, but the chief details of the electrical work will be presented in a separate catalogue.

#### Three Lines to Florida.

The Queen & Crescent Route runs three sleeping-car lines Cincinnati to Jacksonville daily. Shortest line; quickest service; only solid vestibule-train service. Send us your name for further information, printed matter, timetables, etc. Chas. W. Zell, D. P. A., Cincinnati, Ohio; W. A. Beckler, N. P. A., 111 Adams street, Chicago, Ill.; C. A. Baird, T. P. A., Detroit, Mich.; W. W. Dunnivant, Cleveland, Ohio.

#### Reduced Excursion Rates to Washington, Christmas Day.

The Pennsylvania Railroad Co., for the benefit of those desiring to witness the foot-ball game at Washington, D. C., Tuesday, December 25, between the Union College Club of Schenectady and the Columbia Athletic Club of Washington, will sell to the public at their Baltimore ticket offices, December 25, excursion tickets to Washington, good for return passage until Wednesday, December 26, inclusive, at the low rate of \$1.25 for the round trip.

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THE New York & New England Railroad, at its Boston ticket offices, has through tickets on sale, including transfer at New York, to Philadelphia, Baltimore and Washington. Ticket agent will quote rates and give all information on application.	
Important to Commercial Travelers.	
On and after December 1 baggage agents of the Baltimore & Ohio Railroad Co. will accept coupons from mileage books issued by the Baltimore & Ohio Railroad, Pittsburgh & Western Railway, Baltimore & Ohio Southwestern Railway and Valley Railway of Ohio in payment for excess baggage charges at their face value, two cents each. This arrangement will not include Baltimore & Ohio mileage books endorsed "good only on Baltimore & Ohio," Baltimore & Ohio Southwestern mileage advertising books nor books older than one year from date of issue.	



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TO THE HOLDERS OF  
**FIRST MORTGAGE**  
**7 PER CENT. BONDS**  
 OF THE  
**CHARLOTTE, COLUMBIA**  
 AND  
**AUGUSTA**  
**RAILROAD CO.**  
 MATURING JANUARY 1ST, 1895.

NEW YORK, December 1st, 1894.  
 The holders of the \$2,000,000 First Mortgage Bonds of The Charlotte, Columbia and Augusta Railroad Company, maturing January 1st, 1895, are hereby notified that, pursuant to an agreement heretofore made under the "Richmond Terminal" plan of reorganization, the MARYLAND TRUST COMPANY will purchase said Bonds at par and accrued interest to date of maturity (at which time interest will cease), upon presentation and surrender thereof at its office in BALTIMORE, MD., on or after January 1st, 1895, or, at the option of the Bondholders, will arrange to extend such Bonds for fifteen years from July 1st, 1894, at five per cent per annum interest, upon terms set forth in the attached notice of the said MARYLAND TRUST COMPANY, if presented at its office on or before December 20, 1894.

SOUTHERN RAILWAY COMPANY,  
 W. A. C. EWEN, Secretary.

BALTIMORE, MD., December 1st, 1894.  
 In accordance with the foregoing notice, the MARYLAND TRUST COMPANY offers to the holders of Charlotte, Columbia and Augusta First Mortgage Seven per cent. Bonds due January 1st, 1895, who shall present same at its office on or before December 20th, 1894, the privilege of extending them at Five per cent. per annum for fifteen years from July 1st, 1894, upon payment of Two and one-half per cent. upon the amount of Bonds so extended.

Those who do not wish their Bonds extended upon these terms may have them purchased at par and accrued interest to date of maturity by presenting them on or after January 1st, 1895, at the office of the MARYLAND TRUST COMPANY.

Thus the holder of \$1,000 Charlotte, Columbia and Augusta First Mortgage Seven per cent. Bond, upon presenting it for extension, will receive \$1,000 extended Five per cent. Bond, carrying coupon due July 1st, 1895, and \$10.00 in cash.

Or if presenting it for purchase will receive:  
 Principal, . . . \$1,000 00  
 Interest, . . . 35 00  
 Cash, . . . \$1,035 00

The extended Bonds are assumed by the Southern Railway Company, principal and interest payable in gold, as per extension agreement and coupon sheet attached to each Bond. THE LIEN REMAINS UNDISTURBED, and \$2,000,000 of the First Consolidated Mortgage Gold Five per cent. Bonds of the Southern Railway Company are reserved by the Trustee, for which the holders of Charlotte, Columbia and Augusta Extended Bonds have the right to exchange their Bonds at any time prior to maturity.

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 Becomes surety on Bonds of officers and employees of Banks, Railroad, Express and Telegraph Companies, Officials of States, Cities and Counties. Also on Bonds of Executors, Administrators, Guardians, Trustees, Receivers, Assignees, Committees, and in Replevin Attachment and Injunction cases and all undertakings in Judicial Proceedings.  
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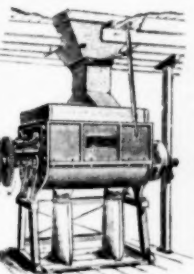
## PROPOSALS.

**U. S. ENGINEER OFFICE—WILMINGTON,**  
 N. C., Dec. 5, 1894.—SEALED PROPOSALS will be received here until 12 o'clock, noon, Jan. 7, 1895, for furnishing and delivering at Fort Caswell, N. C., CEMENT, BROKEN STONE, RUBBLE STONE, and SAND for concrete masonry. All information furnished on application: W. S. STANTON, Maj. Engrs.

**TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., December 5th, 1894.**—Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of December, 1894, and opened immediately thereafter, for all the labor and materials required to furnish and erect complete two passenger elevators in the U. S. Custom house, New York, N. Y., in accordance with drawing and specification, copies of which may be had at this office or the office of the Superintendent of Repairs, New York, N. Y. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids and to waive any defect or informality in any bid should it be deemed in the interest of the Government to do so. All bids received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes sealed and marked, "Proposal for Two Passenger Elevators for the U. S. Custom house, New York, N. Y.," and addressed to CHARLES E. KEMPER, Acting Supervising Architect.

**TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., December 8th, 1894.**—Sealed Proposals will be received at this office until 2 o'clock P. M. on the 24th day of January, 1895, and opened immediately thereafter, for all the labor and material required for the erection and completion of the U. S. Government Building, Cotton States and International Exposition, Atlanta, Georgia, in accordance with drawings and specification, copies of which may be had at this office or the office of the Superintendent at Atlanta, Georgia. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids and to waive any defect or informality in any bid should it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for U. S. Government Building, Cotton States and International Exposition, Atlanta, Georgia," and addressed to CHAS. E. KEMPER, Acting Supervising Architect.

**TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., November 27, 1894.**—Sealed proposals will be received at this office until 2 o'clock P. M. on the 28th day of December, 1894, and opened immediately thereafter, for all the labor and materials required for the stone and brickwork of the superstructure, &c., of the U. S. Postoffice and Courthouse at Kansas City, Missouri, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Kansas City, Missouri. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids, and to waive any defect or informality in any bid should it be deemed in the interest of the Government to do so. All bids received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for the Stone and Brickwork of the Superstructure, &c., of the U. S. Postoffice and Courthouse at Kansas City, Missouri," and addressed to CHARLES E. KEMPER, Acting Supervising Architect.

  
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3 and 4 Box,  
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For further particulars apply to  
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**FOR SALE.**  
**ONE DAVIDSON PUMP,**  
brass lined, 16 in. steam, 9 1/4 x 16 in., 7 Duplex Worthington Pumps, 12 x 6 x 12, several smaller size Duplex Pumps, 4 engines, 20 x 24, 2 engines 10 x 10, 25 return tubular boilers, varying in size from 6 to 100 horse-power each, 14 locomotive boilers, varying in size from 30 to 100 horse-power each. All the above are in good condition and will be sold cheap. Address  
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A No. 8 Dean Pump, in perfect condition, suitable for either boiler or fire purposes.  
Two Warp Splitters and one Cone Grinding In-One Denn Warner, 250 eyes [digo Mill].  
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One 6x8 upright engine.  
One pair 14x14 inch marine engines.  
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A 50 big lot of smaller pumps.  
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